

Student Designation TAMS Student

Last Name Reddy, **First Name** Aman

UNT Email Address AmanReddy@my.unt.edu

High School GPA 3.56

UNT GPA

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
- I am available this fall and spring for UNT-Denton on-site research for 7-12 hours per week during the fall and spring semesters. (via private transportation).
- I am available this summer (2021) for immersive 35-40 hours a week for remote research on either the Denton campus.
- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

Previous research experience I had was through my high school science fair and through the FLL in middle school, an organization developed by lego and the Perot museum with a competition. This research wasn't professional in a lab but consisted of learning the process or development and testing of ideas relevant in a lab.

Vocational Interest

My main interests for my future career lie in the biology and medical field. Even before joining TAMS, I've always enjoyed science classes such as biology and chemistry and have wanted to pursue them in the future. I believe that research will open up a new way to discover how the scientific field works and will open new doors for specific and unique professions.

Why do you want to do Research?

I feel that research gives the opportunity to work in a professional manner and apply the scientific method to discover and learn things outside of a textbook. The hands-on experience incorporated with research is a unique way to learn and gives importance to the information being noted. The value given from research is also essential as it previews the scientific world and could provide an opportunity or outlet in the future for one's career.

STEM Accomplishments

Presidential Award for completing 100 hours of Stem research at the Perot Museum of Nature and Science through the discovery corps program.

College Level STEM Courses Taken

General Chemistry **Grade** YBT

Honors Biology **Grade** YBT

Pre Calculus **Grade** YBT

Grade

Grade

Student Designation TAMS Student

Last Name Kota, **First Name** Harsha

UNT Email Address venkatakota@my.unt.edu

High School GPA 4.01

UNT GPA 3.812

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Previous Research Experience

My research in high school were bases on creating water filtration systems from household items and test the purity thought pH values and other physical properties.

Vocational Interest

I am interested in the following fields of studies:

Electrical Engineering, Biomedical Engineering, Mechanical Engineering, Programming, Computer Science, Cognitive Science, Data Science, Web Development, and Video Game Development, Mathematical Analysis, Statistics.

Why do you want to do Research?

I want to conduct research to hone my interests and learn from peers more knowledgeable than I.

STEM Accomplishments

University of Texas at Dallas Computer Science certificate course of Java, Python, Scratch and Alice.

Created a website as part of volunteer efforts for a local Community Service organization.

High-Scaled Java project that simulates a bank. One can create any 1 of 4 different accounts: Checking, Interest, Deposit, and Saving. All of which have different

setting. This is structure for a multi-user setting.

College Level STEM Courses Taken

MATH 1650 **Grade A**

CSCE 1030 **Grade A**

AP Computer Science Principles **Grade A** (5 on the Exam)

CSCE 1040 (LAB) **Grade A**

CHEM 1430 (LAB) **Grade A**

Student Designation TAMS Student

Last Name Gopalakrishnan, **First Name** Eswar

UNT Email Address EswarGopalakrishnan@my.unt.edu

High School GPA 4.0

UNT GPA 4.0

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Previous Research Experience

During the Fall 2020 semester, I conducted research with Dr. Nicoladie Tam at the University of North Texas. The research I conducted focused on the interactions between decision-making and emotional processing and being able to quantify the neural processing of decision-making, which led into discussions of hemodynamics and signal analysis.

Vocational Interest

In the future, I plan to enter the medical field with hopes to become a neurosurgeon. I want to go into neurosurgery because I have always been interested in the brain and the nervous system in general and I would love to make an impactful change in someone's life that allows them to spend more time with their respective families. In addition, I have recently garnered an interest in global health and would love to spend a portion of my medical career with Doctor without Borders in order to provide third-world countries with better medical care and make sure that everyone is given the same opportunities to succeed.

Why do you want to do Research?

I want to conduct research because I understand the impactful change that I will be making. By conducting research, I am making an impact in the field of science by growing our collective knowledge about a particular aspect of science. In addition, research allows for monumental change in society such as a scientific discovery that can improve the lives of millions.

STEM Accomplishments

I would consider conducting this past fall semester as a great accomplishment. In addition to pursuing one of my interests in neuroscience, I was also able to assist in impactful work that did grow our understanding of our neurological processes.

I am currently writing a book to allow younger students to gain a beginner insight into the world of human anatomy. As a child I was often told to go into the medical field, but I was never given the opportunities to learn about human anatomy as they were often reserved for higher grades. However, I think we can introduce younger students to anatomy if we are able to make it fun and easy.

I am currently apart of the HOSA(Future Health Professionals) and USABO(USA Bio Olympiad) communities at TAMS. Thus, I am currently preparing for their respective competitions.

College Level STEM Courses Taken

Honors Biology for Science Majors **Grade A**
AP Biology **Grade A**
General Chemistry I for Science Majors and CHEM 1430 General Chemistry Laboratory Sequence **Grade A,A**
Pre-Calculus MATH 1650 **Grade A**
Honor Biology for Science Majors Laboratory **Grade A**

Student Designation TAMS Student

Last Name Mayil, **First Name** Surya

UNT Email Address SuryaMayil@my.unt.edu

High School GPA 3.8

UNT GPA

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Previous Research Experience

Vocational Interest

I am interested in the medical field and want to pursue a career in neuroscience or pathology. This could obviously change but I have always been interested in the brain and common diseases for people.

I also like to watch stocks and save some money to buy some. I read a lot of news and my dad and we will make a decision to buy some every once and a while.

Why do you want to do Research?

I enjoy learning about the world and science in the classroom but I 've always wanted an opportunity to practically apply my knowledge. I also have always had a interest in innovation and have been making and testing things since I was a little kid.

STEM Accomplishments

Made it to fourth place in regionals for HOSA under the event medical innovation last year.

My group and I competed in our regions HOSA competition and were one place away from the state qualification. We designed and presented an affordable e-cigarette detector that could be implemented in schools. We programmed it with an Arduino board and made sensors that could detect specific chemicals in vapor clouds.

College Level STEM Courses Taken

Honors Biology **Grade** YBT

General Chemistry **Grade** YBT

Pre-Calculus **Grade** YBT

Remote Chemistry Lab **Grade** YBT

Remote Biology Lab **Grade** YBT

Student Designation TAMS Student

Last Name Dong, **First Name** Kane

UNT Email Address kanedong@my.unt.edu

High School GPA 3.778

UNT GPA

I am available for: I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.

Previous Research Experience

Vocational Interest

Computer Science

Why do you want to do Research?

Conducting research will allow me to experience what real-world CS majors do while also allowing me to contribute to humanitarian efforts.

STEM Accomplishments

IEEE Software Testing Competition at UTD: Use JUnit to design test cases for Java programs, and the score is determined by code coverage and mutation score.

College Level STEM Courses Taken

CSCE 1030: Computer Science I **Grade** YBT

MATH 1710: Calculus 1 **Grade** YBT

CHEM 1413: Honors General Chemistry **Grade** YBT

AP Statistics **Grade** A

AP Computer Science A **Grade** A

Student Designation TAMS Student

Last Name Ramesh, **First Name** Jaishri

UNT Email Address JaishriRamesh@my.unt.edu

High School GPA 3.68

UNT GPA

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Previous Research Experience

I had an internship at UTSW Cardiology Lab where we studied the effects of mice in hypoxic chambers and also Early Summer Research with Dr. Gayatri Mehta.

Vocational Interest

I am interested in pursuing a career in medicine, most likely biology. I am interested in surgery and potentially working for Doctors Without Borders once I am qualified enough to do so.

Why do you want to do Research?

I want to conduct research because I want to pursue my interest in biology beyond the classroom and and develop better problem-solving skills that will help prepare me for my potential careers.

STEM Accomplishments

4th place in Dallas Regional Science Fair for Cellular, Molecular & Computational Biology-This was important because it exposed me to the world of research and was my first science project in a lab.

Early Summer Research 2020- It was my first time doing research remotely and I was able to learn a lot about Electrical Engineering and coding.

2nd place in high school science fair- Did not have access to lab but was still able to create simulation of digestive system at home under 100 dollars

College Level STEM Courses Taken

Honors Biology 1710 **Grade** YBT

Precalculus 1650 **Grade** YBT

Specials Problems EENG **Grade** P(didn't give letter grade either P or F)

Honors Biology **Grade** A

Honors Pre-Calculus **Grade** A

Student Designation TAMS Student

Last Name Selvaa, **First Name** Madhuran

UNT Email Address madhuranselvaa@my.unt.edu

High School GPA 3.971

UNT GPA

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Previous Research Experience

Vocational Interest

I want to be a physician, more specifically I want to go into the fields of orthopedics or sports medicine. I am also interested in pursuing a career in research relating to strength and conditioning and sports physiology, or gene editing and bioengineering.

Why do you want to do Research?

I want to conduct research so I can learn more about biology and discover new ideas and phenomenon that can help people and the world.

STEM Accomplishments

4th place at regional level in the "Medical Math" competition for HOSA (Future Health Professionals Club)

Volunteered in the emergency room at Baylor Scott and White Medical Center in McKinney, TX

Participated in HPREP - Selective 8-week program at UT southwestern that included workshops, hand-on activities and research showcases related to the fields of science and medicine as well as mentorship programs lead by students

from UTSW.

College Level STEM Courses Taken

Calculus 1(MATH 1710) **Grade** YTB

Honors Biology 1 (BIOL 1711) **Grade** YTB

Honors Biology Laboratory (BIOL 1761) **Grade** YTB

Honors General Chemistry (CHEM 1413) **Grade** YTB

General Chemistry Laboratory (CHEM 1430) **Grade** YTB

Student Designation TAMS Student

Last Name Chau, **First Name** Allen

UNT Email Address Allenchau@my.unt.edu

High School GPA 4.0/4.0

UNT GPA NA

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Previous Research Experience

I have worked in the neuroscience lab of Dr. Jannon Fuchs and am currently working in the biomedical AI lab of Dr. Mark Albert.

Vocational Interest

In the future, I would like to pursue a pre-med track with an emphasis on neuroscience. Then, I would like to pursue medical school and residency to finish training. Upon completing residency, I wish to become a professional doctor that specializes in treating neurological disorders.

Why do you want to do Research?

I want to conduct research because I believe that it will give me a means to further delve into my passion of neuroscience and contribute knowledge to the field.

STEM Accomplishments

USA Biology Olympiad Semifinalist - Took the Open Exam and was among top 1,000 high schoolers in the nation out of 12,000+ initial competitors

HOSA State Finalist - Competed in Creative Medical Problem Solving Category where my team(3) was presented an issue and we had to develop an effective and feasible solution under time constraints

DECA State Finalist - Competed in Start a Business Category where my partner and I developed a plan for a medical app that helped students cope with

depression and anxiety in school

College Level STEM Courses Taken

BIOL 1711 Honors Biology I **Grade** YBT (A as of now)

CHEM 1413 Honors General Chemistry **Grade** YBT (A as of now)

Honors Biology Laboratory **Grade** YBT (A as of now)

Math 1710 Calculus I **Grade** YBT (A as of now)

CHEM 1430 Laboratory Sequence for General Chemistry **Grade** YBT (A as of now)

Student Designation TAMS Student

Last Name Jimenez, **First Name** Liang

UNT Email Address liangjimenez@my.unt.edu

High School GPA 4.4

UNT GPA

I am available for: I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.

Previous Research Experience

Research project with Dr. Jose Jimenez to improve the linearity of gallium nitride transistors through alterations of the gate length and epitaxy (High School Level)

Vocational Interest

Electrical engineering, neuroscience, programming, cognitive science, mechanical engineering, iOS development, web development, data science, non-profit, social impact, international development, and global health

Why do you want to do Research?

To deepen my knowledge in a specific technical area and reveal the power of STEM research to make an impact on the world

STEM Accomplishments

First Place School Science Fair - Electrical engineering project that improved the linearity of GaN transistors

Kode With Klossy Scholar - Coded a website dedicated to helping users understand their environmental footprint

College Level STEM Courses Taken

BIOL 1711 Honors Biology Majors I **Grade** YBT

CHEM 1413 Honors Gen Chem **Grade** YBT

MATH 1650 Pre-Calculus **Grade** YBT

CHEM 1430 Lab Seq Gen Chem **Grade** YBT

BIOL 1761 Honors Biol Lab **Grade** YBT

Student Designation TAMS Student

Last Name Gopalakrishnan, **First Name** Eswar

UNT Email Address EswarGopalakrishnan@my.unt.edu

High School GPA 4.0

UNT GPA

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Previous Research Experience

I am currently conducting research with UNT's Dr. Tam on the interaction of decision-making and emotional processing.

Vocational Interest

I am interested pursuing a degree in neuroscience with hopes of becoming a neurosurgeon in the future. I am attracted to neurology and cognitive sciences because I often find myself struggling with the question: why do people do what they do? This prompted me to focus more intently on neuroscience and the understanding of the brain. I also have developed an interest in global health because I believe that if we are all given the same basic needs the world would be in a better place than where it is today.

Why do you want to do Research?

I want to conduct research because I know the impact that it can make. Conducting research and finding a breakthrough could make individual or global change and change in the lives of many people. However, research can also allow us understand ourselves and the world better, Research on the brain, for example, allows us to gain a better understanding on how our brain work and reacts to different biological systems. This is what inspires me to most, to gain an understanding, because as humans today we would have never been able to be where we are today without research to gain knowledge to build a better future.

STEM Accomplishments

I am conducting research with Dr. Tam at the University of North Texas focusing on the Interaction of decision-making and emotional processing. Research allows me to gain an understanding of cognitive processes through neuroscience, while also doing impactful research that could have a immeasurable effect on society.

As a member of TAMS Medical Society, like-minded student and I are able to collaborate and engage ourselves in the future of medicine. Through the virtual shadowing program, I am able to listen and gain insight from medical professionals on a career in medicine through real life cases and experiences.

As part of UNT HOSA, I am able to gain insight about a career in medicine through volunteering and eventual competitions. These competitions allow me to foster a critical thinking skill that will serve me well in a career in medicine.

College Level STEM Courses Taken

Honors Biology for Science Majors **Grade A**

AP Biology **Grade A**

General Chemistry I for Science Majors and CHEM 1430 General Chemistry Laboratory Sequence **Grade A,A**

Pre-Calculus MATH 1650 **Grade A**

Honor Biology for Science Majors Laboratory **Grade A**

Student Designation TAMS Student

Last Name Gopalakrishnan, **First Name** Eswar

UNT Email Address EswarGopalakrishnan@my.unt.edu

High School GPA 4.0

UNT GPA

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Previous Research Experience

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Vocational Interest

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STEM Accomplishments

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College Level STEM Courses Taken

Honors Biology for Science Majors **Grade A**

AP Biology **Grade A**

General Chemistry I for Science Majors and CHEM 1430 General Chemistry Laboratory Sequence **Grade A,A**

Pre-Calculus MATH 1650 **Grade A**

Honor Biology for Science Majors Laboratory **Grade A**

Student Designation TAMS Student

Last Name Veeramachaneni, **First Name** Srisha

UNT Email Address srishaveeramachaneni@my.unt.edu

High School GPA 3.92

UNT GPA

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Previous Research Experience

No formal lab experience but I have research experience from competitions and fairs. I am eager to learn and contribute during the entire research process.

Vocational Interest

My research interests are in Chemistry and Psychology. Specifically, I would love to inquire about biochemistry and organic chemistry subfields. I have recently developed a passion in pharmaceutical sciences and hope to develop other medicines. During my psychology course, I really enjoyed learning about neurotransmitters as well as the brain.

Why do you want to do Research?

Research will help me delve into what makes up our world and understand scientific processes. I'm looking forward to harvesting valuable leadership and life skills.

STEM Accomplishments

Destination Imagination - Nurtured my creativity and collaboration in technological and scientific skills including coding and soldering.

Computer Skills - In ninth grade I earned a Microsoft Touch Develop certification and Python certification.

Science Fair - I studied the heart beat of daphnia in relation to various music tempos.

College Level STEM Courses Taken

CHEM 1410 Section 009 - Chemistry **Grade** YBT (A as of now)

AP Psychology **Grade** A

AP Computer Science Principles **Grade** A

BIOL 1761 Section 527 - Biology Lab **Grade** YBT (A as of now)

CHEM 1430 Section 356 - Chemistry Lab **Grade** YBT (A as of now)

Student Designation TAMS Student

Last Name Ma, **First Name** Courtney

UNT Email Address courtneyma@my.unt.edu

High School GPA 4.0 (unweighted)

UNT GPA

I am available for:

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Previous Research Experience

I have no prior research experience.

Vocational Interest

Currently I'm interested in becoming a mathematics professor, so I can eventually be a research mathematician. If I decide to pursue something in computer science, I would want to do something in the cybersecurity field because it combines my interests in number theory and computer science.

Why do you want to do Research?

Research is a way I can contribute to something that impacts the world. It involves creating and discovering new technologies or concepts that advance society.

STEM Accomplishments

I qualified for USAMO by getting a score of 11 on the AIME. The USAMO is a highly selective high school nation wide math competition.

I attended Math Prize for Girls for two years straight. It's a competition where girls from the U.S. and Canada compete in the world's largest math prize for girls.

I attended the Ross Mathematics Program for two years (the second as a junior counselor). It's an intensive six-week number theory based program where students do daily problem sets and attend advanced lectures.

College Level STEM Courses Taken

Calculus 1 **Grade** YBT

Computer Science 1 **Grade** YBT

Honors General Chemistry **Grade** YBT

AP Calculus BC **Grade** A

AP Computer Science Principles **Grade** A

Student Designation TAMS Student

Last Name Lam, **First Name** Aaron

UNT Email Address aarlam04@gmail.com

High School GPA 3.7143

UNT GPA

I am available for: I am available this summer (2021) for immersive 35-40 hours a week for remote research on either the Denton campus.

Previous Research Experience

Vocational Interest

I am interested in becoming a medical doctor so I may help people and pursue my passion in biology. I have a desire to help people, and an interest in infectious disease. I want to continue to grow my knowledge so I can help people in any way they need.

Why do you want to do Research?

I want to gain on-hand experience in a research environment, learn about biology and microorganisms in depth, and practice with an expert.

STEM Accomplishments

1st place in Science UIL competition (based on most questions answered correctly)

Top 5 in Mathematics UIL competition in two subsequent years

College Level STEM Courses Taken

Honors Biology I **Grade** YBT

Honors General Chemistry **Grade** YBT

Honors Biology Lab **Grade** YBT

Writing About Literature I **Grade** YBT

Pre-Calculus **Grade** YBT

Student Designation TAMS Student

Last Name Sundar, **First Name** Aadhunik

UNT Email Address aadhunikundar@my.unt.edu

High School GPA 4.0

UNT GPA

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Previous Research Experience

Vocational Interest

I want to obtain a degree in Biochemistry or Biomedical Engineering and continue on to medical school, eventually doing a fellowship in cardiology.

Why do you want to do Research?

I'm very interested in diving into the world of academia. I want to grow as a researcher and person while making contributions that will hopefully make a difference.

STEM Accomplishments

COVID-19 Nonprofit Exchange - Worked with Dr. Heda, a co-founder of nonprofit website covidrxexchange.org to analyze data

College Level STEM Courses Taken

Biology **Grade** A

Chemistry **Grade** A

AP Physics **Grade** 97

Pre-Calculus **Grade** A

Algebra II **Grade** 100

Student Designation TAMS Student

Last Name Dunaway, **First Name** Alexander

UNT Email Address alexanderdunaway@my.unt.edu

High School GPA 4.0

UNT GPA

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Previous Research Experience

I have no previous research experience and am trying to build get some.

Vocational Interest

I am interested in genetics and reproductive sciences.

Why do you want to do Research?

Personally, i am interested in research for the reproductive sciences, because I would like to gain knowledge for a career in which I can help people have a family, a problem I see with many people trying to have kids.

STEM Accomplishments

Math Kangaroo Top 10 placement 7-9 grade

UTA engineering camp

i have previously attended and completed SMI.

College Level STEM Courses Taken

Honors Biology **Grade** Unknown

Chemistry **Grade** 95.56

Chemistry Lab **Grade** 97.44

Biology Lab **Grade** 95.06

Pre Calculus **Grade** 96.18

Student Designation TAMS Student

Last Name Agrawal, **First Name** Neil

UNT Email Address neilagrwal@my.unt.edu

High School GPA 3.80

UNT GPA

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Previous Research Experience

Vocational Interest

I want to computer science oriented research.

Why do you want to do Research?

I want to learn about applications of the computer science field. I don't care what I do as long as I am learning.

STEM Accomplishments

On my first coding competition on October 17, 2020 I got 59th out of 215.
When I was in high school, I skipped Algebra 2 with a 97 on the test.

College Level STEM Courses Taken

Calculus 1 **Grade** YBT

Honors General Chemistry **Grade** YTB

Computer Science 1 **Grade** YTB

Grade

Grade

Student Designation TAMS Student

Last Name Bhakta, **First Name** Dillan

UNT Email Address DillanBhakta@my.unt.edu

High School GPA

UNT GPA

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- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

No former research experience

Vocational Interest

I primarily fall under the Social category and I have an interest in medicine of anything biological.

Why do you want to do Research?

I really want to gain some knowledge in the medical field and science in general. I think that research will give me some experience in these fields.

STEM Accomplishments

I have been and am currently a member of HOSA. I plan to compete this year.

I have taken part in math competitions such as Math Counts and Math Olympiad.

College Level STEM Courses Taken

MATH 1650 **Grade** YBT

BIOL 1711 **Grade** YBT

BIOL 1761 **Grade** YBT

CHEM 1410 **Grade** YBT

CHEM 1430 **Grade** YBT

Student Designation TAMS Student

Last Name Malden, **First Name** Gavin

UNT Email Address GavinMalden@my.unt.edu

High School GPA 3.96

UNT GPA N/A

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
- I am available this summer (2021) for immersive 35-40 hours a week for remote research on either the Denton campus.
- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

N/A

Vocational Interest

I am interested in pursuing applied mathematics or attending medical school at the UNT Health Science Center through the 3+4 D.O. program.

Why do you want to do Research?

To become more familiar with the laboratory/research environment and to gain valuable knowledge that will help me in my career.

STEM Accomplishments

I was a member of Mu Alpha Theta during my freshman and sophomore years of high school (and will be this year).

Also, I earned a perfect score on the math section of the PSAT during my sophomore year of high school and earned a 35 composite on the ACT the summer before my sophomore year of high school.

I shadowed a pediatrician at my local doctor's office for 15 hours this summer.

I participated in First Tech Challenge (FTC) Robotics during my freshman year of high school.

College Level STEM Courses Taken

BIOL 1711 **Grade** YBT

BIOL 1761 **Grade** YBT
CHEM 1413 **Grade** YBT
CHEM 1430 **Grade** YBT
MATH 1710 **Grade** YBT

Student Designation TAMS Student

Last Name Thomas, **First Name** Chris

UNT Email Address christhomas2@my.unt.edu

High School GPA 3.8

UNT GPA

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
- I am available this summer (2021) for immersive 35-40 hours a week for remote research on either the Denton campus.
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Previous Research Experience

I have done research for History on Alexander the Great for a paper and I did research for a high school science fair, in which I built a mini Tesla coil and studied how the number of coils affected the energy levels.(both high school)

Vocational Interest

I want to be a dermatologist or to be a researcher in some field of science, preferably in biology or chemistry.

Why do you want to do Research?

Why I want to research because there still is a lot of things to be discovered and a lot of advancements to be made. it would be pretty cool if something you did helped make the world a better place, and that's why I want to research.

STEM Accomplishments

I competed in a science fair for my school and got first place in my grade for making a mini Tesla coil out of copper wire, a battery, and some electrical chord.

College Level STEM Courses Taken

Honors Biology **Grade** YBT

Gen Chemistry **Grade** YBT

Chem lab **Grade** YBT

Bio lab **Grade** YBT

Student Designation TAMS Student

Last Name Dodla, **First Name** Nithin

UNT Email Address NithinDodla@my.unt.edu

High School GPA 3.92

UNT GPA

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
- I am available this fall and spring for UNT-Denton on-site research for 7-12 hours per week during the fall and spring semesters. (via private transportation).
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- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

Conducted research at UT Southwestern. I shadowed a pulmonologist and interviewed patients about their transplant experiences, then wrote a research paper regarding triple organ transplants.

Vocational Interest

My interests lay in medicine, primarily in neuroscience/psychology, because the brain and human nature fascinate me. Also, I'm interested in technology and its applications in healthcare. I hope to one day pursue a career that utilizes technology in healthcare because I believe that the future of healthcare will be technology-oriented.

Why do you want to do Research?

The ability to use my skills to expand my knowledge and experience through research in an area of my interest is exciting for me.

STEM Accomplishments

Biomedical Academy - got accepted into this program that gives a more in-depth and hands-on experience over medicine

HOSA - participated in this competition, which helped me further my knowledge in the medical field

College Level STEM Courses Taken

Honors Biology for Science Majors I / BIOL 1711 **Grade** YBT

General Chemistry for Science Majors / CHEM 1410 **Grade** YBT

Precalculus / MATH 1650 **Grade** YBT

Honors Biology for Science Majors Laboratory / BIOL 1761 **Grade** YBT

Laboratory Sequence for General Chemistry / CHEM 1430 **Grade** YBT

Student Designation TAMS Student

Last Name Vumma, **First Name** Lavanya

UNT Email Address lavanyavumma@my.unt.edu

High School GPA 3.95/4.0

UNT GPA

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Previous Research Experience

Vocational Interest

Cardiothoracic Surgeon - Medicine has always interested me due to its varying degrees of complexity and the variety of knowledge needed to solve its problems. I have always loved solving puzzles, and since medicine can be seen as a puzzle enthusiast's paradise, I will never be bored and will always be learning.

Why do you want to do Research?

I want to conduct research to gain a broader perspective. The thought process involved in research is intriguing, and it would make me more practical.

STEM Accomplishments

Excellence in Mathematics (2018)
- tutored and helped peers in Algebra 1

College Level STEM Courses Taken

Honors Biology 1 (1711) **Grade** YBT
Honors Chemistry I (1413) **Grade** YBT
Pre-Calculus (1650) **Grade** YBT
Honors Biology for Science Majors Laboratory (1761) **Grade** YBT
Laboratory Sequence for General Chemistry (1430) **Grade** YBT

Student Designation TAMS Student

Last Name Rayadurgam, **First Name** Mahati

UNT Email Address mahatirayadurgam@my.unt.edu

High School GPA 3.9

UNT GPA

I am available for:

- I am available this fall and spring for UNT-Denton on-site research for 7-12 hours per week during the fall and spring semesters. (via private transportation).
- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

Vocational Interest

One of my main interests in Biology is Neuroscience, particularly emotional cognition and reasoning. I have always been interested in the emotional aspect of neuroscience and I am fascinated by how they enhance the function of the brain as a whole. Another interest of mine are the Medical Sciences, particularly Anatomy and Physiology. I personally am enthralled by the human body as a whole and how each system works together as one unit to optimize human functionality. I am also amazed at how self-sufficient the human body really is and how it adapts spontaneously to its surroundings.

Why do you want to do Research?

As a self-motivated and goal oriented TAMS student in the Traditional Science Track, I seek this research opportunity so that I may gain in-depth knowledge upon emotional and cognitive neuroscience. Through this experience, I hope to satiate my curiosity about why and how humans process emotions the way we do.

STEM Accomplishments

State Science Fair:

In 8th grade, I had the opportunity to participate in the district science fair, in which I was able to progress into state science fair. My project was on the filtration of lead-filled water with substances of different pH.

HOSA Districts:

In 9th and 10th grade, I participated in the Centennial HOSA team for the district

competition. My topic was on behavioral sciences and emotional reasoning (a topic I am very much interested in).

Math and Science Team:

In 8th grade I participated in the Texas Math and Science Team for which we went to competitions all over the district and took exams for math and science.

College Level STEM Courses Taken

AP Biology **Grade** 95

Honors Biology **Grade** 90

Biology Lab **Grade** 96

General Chemistry **Grade** 95

Chemistry Lab **Grade** 90

Student Designation TAMS Student

Last Name Zhao, **First Name** Billy

UNT Email Address WilliamZhao@my.unt.edu

High School GPA 3.95

UNT GPA

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Previous Research Experience

Vocational Interest

Currently, I am interested in investing in the field of chemistry, particularly organic chemistry and biochemistry.

Why do you want to do Research?

I have a deep interest in the field of chemistry, especially when it pertains to life. I hope that getting a research opportunity will help answer some of my unanswered questions in this field.

STEM Accomplishments

College Level STEM Courses Taken

BIOL 1711 (Honors Biology for Science Majors) **Grade** YBT

BIOL 1761 (Honors Biology for Science Majors Laboratory) **Grade** YBT

CHEM 1413 (Honors General Chemistry) **Grade** YBT

CHEM 1430 (Laboratory Sequence for General Chemistry) **Grade** YBT

MATH 1710 (Calculus I) **Grade** YBT

Student Designation TAMS Student

Last Name Alankar, **First Name** Tejas

UNT Email Address TejasAlankar@my.unt.edu

High School GPA 3.89

UNT GPA

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
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- I am available this summer (2021) for immersive 35-40 hours a week for remote research on either the Denton campus.
- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

High School:

-worked with an independent non-profit on researching the relationships between how the brain reacts to different note or pitches (fall 2019-summer 2020)

- completed the IBM quantum computing/chemistry summer school, researched a multitude of algorithms (summer 2020)

Vocational Interest

I am interested in the fields of Chemistry and Environmental Science, but I also enjoy learning in all pathways relating to science. A couple of subtopics that I would want to potentially research in are environmental biology, analytical chemistry, environmental conservation, and quantum theory.

Why do you want to do Research?

I wanted to learn about new technologies and upcoming ideas in the field of Chemistry and Environmental Science. I am very excited to learn about how research is conducted at a high level.

STEM Accomplishments

Science Olympiad- was on the Science Olympiad team and placed in regional events that include (density lab, wright stuff, bottle rocket, chem lab).

Member of Coppell Solar car- was underclassman head for two years and build, tested, and raced a fully solar-powered car by using Solidworks for development.

Completed the IBM quantum challenge (coding) and achieved a superior score rating.

College Level STEM Courses Taken

BIOL 1711 **Grade** YBT

CHEM 1410 **Grade** YBT

MATH 1650 **Grade** YBT

BIOL 1761(lab) **Grade** YBT

CHEM 1430(lab) **Grade** YBT

Student Designation TAMS Student

Last Name Ayalavarapu, **First Name** Venkat

UNT Email Address Venkatayalavarapu@my.unt.edu

High School GPA 3.7

UNT GPA

I am available for:

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- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

For previous research experience, I am currently apart of the Dr. Tam's lab and working on a behavioral and neuroscience research project.

Vocational Interest

Neurosurgery

Why do you want to do Research?

I am interested in research because it offers me the opportunity to go in depth into my field of interest.

STEM Accomplishments

Pentathlon Science 1st place

Pentathlon Math 2nd place

Pentathlon Overall 1st place

Science and Sanatana Dharma scholarship recipient

College Level STEM Courses Taken

General chemistry **Grade A**

Honors Biology **Grade A**

Precalculus **Grade B**

Biology Lab **Grade A**

Chemistry Lab **Grade A**

Student Designation TAMS Student

Last Name Engstrom, **First Name** Amelia

UNT Email Address ameliaengstrom@my.unt.edu

High School GPA 4.0 (unweighted), 5.1739 (weighted), 111.7304 (WTD numerical)

UNT GPA

I am available for:

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Previous Research Experience

Vocational Interest

I am interested in molecular and microbiology in general. What particularly peaks my interest are the bacteria found in the gut and how that affects other parts of the organism other than digestion. I also find hormones and how they dictate actions in an organism.

Why do you want to do Research?

Research allows one to experience the expansive nature of science first hand. It is the first step to understanding the world better.

STEM Accomplishments

College Level STEM Courses Taken

BIOL 1711 **Grade** YBD

CHEM 1413 **Grade** YBD

MATH 1650 **Grade** YBD

AP Statistics **Grade** A

Student Designation TAMS Student

Last Name Jojo, **First Name** Caroline

UNT Email Address carolinejojo@my.unt.edu

High School GPA 3.7

UNT GPA

I am available for:

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Previous Research Experience

No previous research

Vocational Interest

I am interested in doing any kind of biology or psychology research. Main interest is anything related to human physiology.

Why do you want to do Research?

I want to conduct research so that I can learn the proper way of conducting research, and so that I can learn more in depth about a topic I am interested in.

STEM Accomplishments

None

College Level STEM Courses Taken

AP Biology **Grade** 93

Biology **Grade** 89

Chemistry **Grade** 96

Grade

Grade

Student Designation TAMS Student

Last Name Eluri, **First Name** Venkata

UNT Email Address VenkataEluri@my.unt.edu

High School GPA

UNT GPA 3.45

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
- I am available this summer (2021) for immersive 35-40 hours a week for remote research on either the Denton campus.

Previous Research Experience

Vocational Interest

I am interested in the medical field, and intend to become a physician as well as a medical researcher. I am interested in microbiology, molecular biology, biochemistry, and genetics in the science field.

Why do you want to do Research?

Research in and of itself is very intricate, and I want to take up various challenges and problem-solve along the course of the scientific method.

STEM Accomplishments

College Level STEM Courses Taken

Biology for Science Majors (A and B) **Grade B**

General Chemistry (A) **Grade A**

General Chemistry (B) **Grade B**

Applied Statistics **Grade YBT**

Microbiology **Grade YBT**

Student Designation TAMS Student

Last Name Tian, **First Name** Zachary

UNT Email Address ZacharyTian@my.unt.edu

High School GPA 4.0 unweighted

UNT GPA

I am available for: I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.

Previous Research Experience

Vocational Interest

I would like to conduct research within Computer Science and Engineering, particularly something that can do with machine learning such as natural language processing or computer vision to apply to solve real world problems such as improving efficiency within models to take up less data.

Why do you want to do Research?

I would like to conduct research to gain exposure to how research works in a college environment, and expand my knowledge on my planned major

STEM Accomplishments

1st Place Winner, UTD STEM Bridge Summer Research Program

Worked on Donkey Car machine learning and trying to implement domain adaptation machine learning and neural networks.

SAT Math Level 2 Subject Test: score of 790.

1470 SAT with Essay: 680 English, 790 Math.

College Level STEM Courses Taken

Computer Science **Grade** YBT

Chemistry Honors **Grade** YBT

Calculus I **Grade** YBT

Computer Science Principles **Grade** 96

Grade

Student Designation TAMS Student

Last Name Xu, **First Name** Angelina

UNT Email Address angelina.j.xu@gmail.com

High School GPA 4.44

UNT GPA

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
- I am available this fall and spring for UNT-Denton on-site research for 7-12 hours per week during the fall and spring semesters. (via private transportation).
- I am available this summer (2021) for immersive 35-40 hours a week for remote research on either the Denton campus.
- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

Research Assistant at UTD (Mechanical Department)

Summer research with Dr. Acree at UNT (Chemistry Department)

Vocational Interest

I am interested in the natural sciences, and would like to pursue a career in topics related to this field. I am actively seeking out opportunities to find research in biology and related subjects to work towards this goal.

Why do you want to do Research?

It would be an honor to help out professors in their field, and the experience gained from college-level research is invaluable.

STEM Accomplishments

2020 Newman Foundation Endowment Research Award (UNT TAMS)

2nd Prize winner of CAST-STAR Award (STEM bridge summer research in UTD)

College Level STEM Courses Taken

Honors Biology **Grade** YBT

Honors Chemistry **Grade** YBT

Calculus I **Grade** YBT

AP Biology **Grade** 5 (AP exam)

Student Designation TAMS Student

Last Name Kandi, **First Name** Rohit

UNT Email Address RohitKandi@my.unt.edu

High School GPA 4.0

UNT GPA N/A

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
- I am available this summer (2021) for immersive 35-40 hours a week for remote research on either the Denton campus.
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Previous Research Experience

Previously, I have engaged in high school research. My biology teacher, Mrs. Iqbal, was able to guide me through my leaf tissue research and allowed me to advance to districts. I am looking to advance my research interests at the college-level.

Vocational Interest

I am interested in both biological and chemical research. I am very interested in the research fields of genetics and molecular biology, especially evolution, molecular synthesis, and cell function. I enjoy looking at the genetic spectrum of organisms in order to analyze larger patterns. In my previous science fairs, I have explored these fields and was able to advance to districts/regionals. I am looking forward to working with UNT professors in this same field.

Why do you want to do Research?

I believe that I am a very enthusiastic, motivated student. Before, I was limited to my high school teachers, who did not have much experience in my desired work. By conducting research at TAMS/UNT, I believe that I can narrow my field of interest and work with an experienced professor.

STEM Accomplishments

2018 – 2019 Uplift North Hills Preparatory Science Fair: Honorable Mention | The Unlimited Potential of Common Leaves

In today's society, one of the main problems in the healthcare field is the loss or failure of a vital organ. Because of this, the number of people that are awaiting an organ transplant has risen above 75,000 people. I experimented with different leaf

types to determine which was the most effective as sustaining itself as a cardiac tissue. I got honorable mention and advanced to district & regional science fair.

2018 - 2019 HOSA (Health Occupations Students of America) Competitions | District Qualifiers

During my freshman year of high school, I qualified in three team events and was able to advance with my school from the qualifiers.

2017 - 2018 Uplift North Hills Preparatory Science Fair: Second Place | Artificial Intelligence - The Fate of Our Future

Artificial Intelligence (A.I.) is a vastly popular topic in today's world of robotics and has captured the attention of many people, including me! I built a robot and programmed it in three different ways to shoot a ball at a target and find the most efficient program. I got second place and advanced to my district science fair.

College Level STEM Courses Taken

BIOL 1711: Honors Biology for Science Majors I **Grade** YBT (I have not taken any college courses previously)

BIOL 1761: Honors Biology for Science Majors Laboratory **Grade** YBT (I have not taken any college courses previously)

CHEM 1413: Honors General Chemistry **Grade** YBT (I have not taken any college courses previously)

CHEM 1430 - Laboratory Sequence for General Chemistry **Grade** YBT (I have not taken any college courses previously)

MATH 1650: Pre-Calculus **Grade** YBT (I have not taken any college courses previously)

Student Designation TAMS Student

Last Name Kumaran, **First Name** Shweta

UNT Email Address shwetakumaran@my.unt.edu

High School GPA 3.974 / 4.0

UNT GPA YBT

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
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- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

Currently, I am conducting research at UNT under Dr. Oliviero Andreussi in the MaterialLab. In this lab, I help in testing and collecting data of a few chemical substances. By this data, we are noticing how effective a substance can be through its reconstruction.

Vocational Interest

The areas of research that interest me are computer science, business, chemistry, and physics. Within the computer science field, I am interested in machine learning and data science. Through the implications of these devices, I hope to help find patterns that can be observed for research purposes. Within the business field, I am interested in research relating to accounting, marketing strategies, and business management techniques to help effectiveness. In the field of chemistry and physics, I am interested in computation through the use of computer languages and the collection of data with the observation of materials.

Why do you want to do Research?

The reason I wish to conduct research is to primarily learn. Through this opportunity of conducting research, I hope to learn new concepts and strategies to further understand the field. Additionally, research interests me as I wish to contribute some knowledge to the world. This new and innovating knowledge can be applied in numerous ways and I wish to help in any way I can.

STEM Accomplishments

JP Morgan Chase Generation Tech 2nd Place: Through this competition, my team and I pitched an app design and its implication to help solve a UN global issue of education. This app we designed was to help teachers in areas of less education to help effectively teach students.

Independence High School Mu Alpha Theta Member: This is the math honor society at my old high school where I participated in mathematical competitions and tutored fellow students.

College Level STEM Courses Taken

MATH 1650 - Pre-Calculus **Grade** YBT

CSCE 1030 - Introduction to Computer Programming C/C++ **Grade** YBT

CHEM 1410 - General Chemistry I **Grade** YBT

CHEM 1430 - General Chemistry I Lab **Grade** YBT

Grade

Student Designation TAMS Student

Last Name Zhang, **First Name** Yunhao

UNT Email Address yunhaozhang@my.unt.edu

High School GPA 4.52

UNT GPA

I am available for:

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Previous Research Experience

College-level mathematics group research (2020 summer) on generalizing Zeckendorf's Theorem to non-constant recurrences (number theory), presented at 19th International Fibonacci Conference, published paper in arXiv.

Vocational Interest

I would like to research in mathematics and computer science, in particular, something that allows me to combine my knowledge in both subjects to apply math to life (e.g. optimization through programming and calculus) or investigate deeper mathematics (e.g. use of machine learning to study harder concepts).

Why do you want to do Research?

I want to conduct research because I've always wanted to explore deeper in topics I learned in class; I also enjoyed the previous research experience.

STEM Accomplishments

AMC 10 2020 AIME Qualifier, DHR - Scored 123 on AMC 10B, passing threshold of DHR

800 SAT II Math & Chemistry

5 on AP Tests for Calculus BC & Computer Science Principles

College Level STEM Courses Taken

Multivariable calculus (calc 3) **Grade** YBT

Computer Science I **Grade** YBT

Honors Chemistry (UNT) **Grade** YBT

AP Calculus BC **Grade** 99

AP Computer Science Principles **Grade** 96

Student Designation TAMS Student

Last Name Anand, **First Name** Shakti

UNT Email Address shaktianand@my.unt.edu

High School GPA

UNT GPA 4.0

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
- I am available this fall and spring for UNT-Denton on-site research for 7-12 hours per week during the fall and spring semesters. (via private transportation).

Previous Research Experience

Vocational Interest

I hope to become a doctor, and go into either surgery or anesthesiology.

Why do you want to do Research?

I want to conduct research because I want to further my understanding beyond what is in the textbook, and allow me to apply my studies.

STEM Accomplishments

North South Foundation Brain Bee Regionals first place and national finalist. It is a competition about the brain. I competed against the Dallas area.

Science Olympiad Invitationals Astronomy first place and Chemistry lab second place. I competed against people from multiple states. Astronomy has only has a test portion, Chemistry lab has a lab portion as well as a test.

College Level STEM Courses Taken

Honors Biology majors 1 and 2 **Grade A**

Calculus 1 **Grade A**

Honors general chemistry **Grade A**

General Psychology 2 **Grade A**

Calculus 2 **Grade A**

Student Designation TAMS Student

Last Name Sankar, **First Name** Subiksha

UNT Email Address SubikshaSankar@my.unt.edu

High School GPA 3.9

UNT GPA

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
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Previous Research Experience

Vocational Interest

I am fascinated by both biology and chemistry as my career goal is to become a neuroscience researcher. Recently I have developed a fascination towards microbiology, cell biology, biochemistry, and synthetic organic/bioorganic chemistry.

Why do you want to do Research?

I want to constantly be challenged by the unknown tedious subjects and have the opportunity to apply the information I learn in classrooms.

STEM Accomplishments

HOSA Competition(career display: orthopedic surgeon) State second 2019-2020
FISD Science Fair Honorable Mention(9th) and First (10th) in health/medicine
Gold In Academic Pentathlon Math (8th)

College Level STEM Courses Taken

MATH 1650 **Grade** YBT
CHEM 1410 **Grade** YBT
BIOL 1711 **Grade** YBT
BIO 1761 **Grade** YBT
CHEM 1430 **Grade** YBT

Student Designation TAMS Student

Last Name Cherukuru, **First Name** Devna

UNT Email Address devnacherukuru@my.unt.edu

High School GPA 3.963/4

UNT GPA

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
- I am available this summer (2021) for immersive 35-40 hours a week for remote research on either the Denton campus.
- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

Vocational Interest

I want to be a doctor and I have wanted to for a very long time. I am very interested in medicine and health as well as psychology, biology, chemistry, oncology, neuroscience, and cardiology. I am also interested in genetics, virology, immunology, and epidemiology. I am also interested in math and I started a math teaching business.

Why do you want to do Research?

I want to make the world a better place and be able to have as many people as possible out of pain and suffering and I truly believe conducting research is a way of doing that a small step at a time.

STEM Accomplishments

I started a math teaching business with a friend where I taught about 20 kids ranging from kindergarten to 10th grade different types of math for 10 weeks during the summer.

I was a lab assistant for my former chemistry teacher and every time we did a lab in class I would help her with all the setup, assist people doing the experiment, and I would assist her with the cleaning process afterwards.

I tutored my peers in both honors chemistry and honors biology as well as honors geometry, honors algebra II, and honors precalculus at my old high school.

College Level STEM Courses Taken

BIOL 1711 Honors Principles of Biology I **Grade** YBT

BIOL 1761 Honors Biology for Science Majors Laboratory **Grade** YBT

CHEM 1410 General Chemistry for science majors **Grade** YBT

CHEM 1430 Laboratory Sequence for General Chemistry **Grade** YBT

MATH 1650 Pre-Calculus **Grade** YBT

Student Designation TAMS Student

Last Name Kim, **First Name** Ajeong

UNT Email Address ajeongkim@my.unt.edu

High School GPA 4.47

UNT GPA

I am available for:

- I am available this fall and spring for UNT-Denton on-site research for 7-12 hours per week during the fall and spring semesters. (via private transportation).
- I am available this summer (2021) for immersive 35-40 hours a week for remote research on either the Denton campus.
- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

I had high school level research regarding the physical demonstration of different heat transfer methods and waves.

Vocational Interest

I am interested in virology, immunology, and microbiology. I like to study biology at a cellular level and examine how it accumulates to bigger stimulus in one's body. How systematic and organized the cells are impresses me, and I am intrigued by how the body responds to different stimulus.

Why do you want to do Research?

Research allows me to actualize and contemplate over the theoretical applications and encounter problems and solutions that I never expected.

STEM Accomplishments

3rd place at districts science fair: I won 3rd place at the Plano district science fair with the previously stated research.

2nd place for purple comet math meet: I won 2nd place at the purple comet math meet competition as a team.

Participated in regional science fair.

College Level STEM Courses Taken

Calculus 2 **Grade** YBT

Honors Biology **Grade** YBT
Honors Chemistry **Grade** YBT
Biology Lab **Grade** YBT
Chemistry Lab **Grade** YBT

Student Designation TAMS Student

Last Name Beard, **First Name** Andrew

UNT Email Address andrewbeard2@my.unt.edu

High School GPA 3.947

UNT GPA YBT

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
- I am available this summer (2021) for immersive 35-40 hours a week for remote research on either the Denton campus.
- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

None

Vocational Interest

None in particular. I'm interested in too many things to decide.

Why do you want to do Research?

I'm very interested in the STEM fields and want to make my own contribution to them, as well as advance my own education further.

STEM Accomplishments

UIL Science, a competition which tests knowledge of biology, chemistry, and physics. In my freshman year, I made 1st place overall and in the biology subcategory at the district meet, 1st place in the biology subcategory at regional, and 2nd place in the biology subcategory at state. Unfortunately, the competition was cancelled my sophomore year due to COVID-19.

College Level STEM Courses Taken

BIOL 1711 **Grade** YBT

CHEM 1413 **Grade** YBT

MATH 1710 **Grade** YBT

Grade

Grade

Student Designation TAMS Student

Last Name Tadigotla, **First Name** Bhavik

UNT Email Address bhaviktadigotla@my.unt.edu

High School GPA 4.4

UNT GPA 4.0

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
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Previous Research Experience

I am passionate about life sciences and chemistry research as I have spent two years conducting biochemistry research into the efficacy of phenolic compounds in combatting bacterial growth. I have also conducted university-level research at UNT in constructing a cybersecurity system to prevent network router attacks.

Vocational Interest

I am very passionate about biochemistry. Our life exists because of the numerous biochemical interactions that take place in our body. I find investigating biochemical processes and learning about them to be very interesting. In addition, I am also very passionate about the field of medical science. As an aspiring doctor, I would like to conduct research that is able to help the lives of people that face painful conditions such as cancer and neurodegenerative diseases.

Why do you want to do Research?

I am very passionate about science and research, so I would like to use my interest in biology and chemistry to aid in research that can genuinely improve the lives of numerous individuals. In addition, I would also like to use this opportunity to expand my horizons and learn about unique aspects of biology and chemistry.

STEM Accomplishments

I was a finalist at the 2019 Texas Science and Engineering Fair (TXSEF) for my project that utilized the antioxidant properties of phenolic compounds to inhibit bacterial growth.

I was a finalist (3rd place) at the 2019 Texas Junior Academy of Science (TJAS) for my project that studied the antimicrobial and antioxidant properties of phenolic compounds.

For the second year in a row, I was a finalist (2nd place) at the 2020 Texas Junior Academy of Science (TJAS) for my project that developed a natural supplement using the antioxidant properties of phenolic compounds to inhibit bacterial growth.

College Level STEM Courses Taken

AP Computer Science Principles **Grade** 100

AP Calculus BC **Grade** 100

AP Biology **Grade** 100

BIOL 1761 **Grade** 98

CHEM 1410 **Grade** 97

Student Designation TAMS Student

Last Name Zeng, **First Name** Michelle

UNT Email Address MichelleZeng@my.unt.edu

High School GPA 4.0 (out of 4.0)

UNT GPA

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
- I am available this fall and spring for UNT-Denton on-site research for 7-12 hours per week during the fall and spring semesters. (via private transportation).
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- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

I took an online Bioinformatics Course taught by a professor from University of Michigan, learned basic Unix, Python, and R programming to process Covid-19 data.

Vocational Interest

I am interested in hands-on work in the fields of biology and chemistry. I am also interested in applying computational knowledge to my research.

Why do you want to do Research?

I am eager to improve my ability to comprehend complex science concepts and utilize knowledge learned in class and through research to solve real-life problems.

STEM Accomplishments

I participated in a Hackathon (called eHack for Charity) to create a program that helps with disaster relief. My team created a program about Tornado probability in Texas, and we won an award for the most computationally impressive.

I participated in the 2019 Tapia summer camp at Rice University. My team of three won 2nd place in the Engineering contest.

College Level STEM Courses Taken

AP Computer Science Principles **Grade** Collegeboard: 5

AP Computer Science A **Grade** Collegeboard: 4

Biology + Lab **Grade** YBT

Honors Chemistry + Lab **Grade** YBT

Pre-calculus **Grade** YBT

Student Designation TAMS Student

Last Name Zeng, **First Name** Claire

UNT Email Address ClaireZeng@my.unt.edu

High School GPA 4.0/4.0

UNT GPA

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
- I am available this fall and spring for UNT-Denton on-site research for 7-12 hours per week during the fall and spring semesters. (via private transportation).
- I am available this summer (2021) for immersive 35-40 hours a week for remote research on either the Denton campus.
- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

N/A

Vocational Interest

I am interested in entering the field of chemistry or biology in the future. I also want to be able to use and advance my computer science knowledge. Using these skills, I should be able to contribute in any way I can.

Why do you want to do Research?

I want to conduct research to develop a deeper understanding of a subject, acquire college skills, and be able to solve complex scientific problems.

STEM Accomplishments

Rice Tapia Camp. It was a week-long STEM-based camp where we worked on two projects and other STEM activities.

eHack for Charity. I participated in a Hackathon to create a tornado probability and information program and won "most computationally impressive".

College Level STEM Courses Taken

Honors General Chemistry with Lab **Grade** YBT

Honors Biology with Lab **Grade** YBT

Pre-Calculus **Grade** YBT

AP Computer Science A **Grade** 5 (CollegeBoard)

AP Computer Science Principles **Grade** 5 (CollegeBoard)

Student Designation TAMS Student

Last Name Joshi, **First Name** Sanika

UNT Email Address sanikajoshi@my.unt.edu

High School GPA 4.0

UNT GPA

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
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- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

Vocational Interest

Interested in biomedical engineering.

Why do you want to do Research?

I want to be involved in the process of translating discoveries into tangible ways to make a real impact as well as deepen and explore new interests in STEM.

STEM Accomplishments

Health Occupations Students of America International Qualifier - placed 1st out of 250+ students in the state of Texas for the nutrition knowledge exam. Competed in the Virtual International Leadership Conference.

AP Biology Faculty Award - chosen as the most outstanding student in the subject area out of 150+ students taking the course during the 2019-2020 school year

HOSA Medical Terminology State Qualifier - placed 4th out of 100+ students and qualified for state as an alternate

College Level STEM Courses Taken

Calculus 1 **Grade** YBT

Honors General Chemistry I **Grade** YBT

Honors Biology I **Grade** YBT

Grade

Grade

Student Designation TAMS Student

Last Name Chang, **First Name** Emily

UNT Email Address EmilyChang@my.unt.edu

High School GPA 4.54 (weighted)

UNT GPA

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
- I am available this fall and spring for UNT-Denton on-site research for 7-12 hours per week during the fall and spring semesters. (via private transportation).
- I am available this summer (2021) for immersive 35-40 hours a week for remote research on either the Denton campus.
- I am available this summer (2021) for a 10-week on-site research experience at the Denton Campus, via private transportation, if necessary (or for residential living, pending opening of residence halls).

Previous Research Experience

Vocational Interest

In the future, I plan on majoring in biology or chemistry. I want to attend medical school and become a doctor. I don't specifically know what fields I'm interested in yet. I'm open to trying and learning new things because I'm not completely decided on my future.

Why do you want to do Research?

I'm really interested in science, and I want to take the opportunity to learn more. I'm interested in discovering new things and benefiting my community.

STEM Accomplishments

I was awarded honorable mention in the Plano District Science Fair in Behavioral Sciences. Our project was about how outside and inner expectations affected student's test scores.

I was a co-founder of the Shepton Girls in STEM club. We promoted closing the gender gap in STEM and invited guest speakers over to talk.

I was a Perot Discovery Corps volunteer. I spent 100+ hours in the summer volunteering in the Perot exhibit hall.

College Level STEM Courses Taken

Honors Biology for Science Majors **Grade** YBT

Honors General Chemistry **Grade** YBT

Pre-Calculus **Grade** YBT

Honors Biology for Science Majors Laboratory **Grade** YBT

Laboratory Sequence for General Chemistry **Grade** YBT

Student Designation TAMS Student

Last Name Manjunath, **First Name** Amita

UNT Email Address amitamanjunath@my.unt.edu

High School GPA 4.0

UNT GPA 4.0

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
- I am available this summer (2021) for immersive 35-40 hours a week for remote research on either the Denton campus.

Previous Research Experience

N/A

Vocational Interest

I am interested in studying anything related to the life or the environment in general.

Why do you want to do Research?

I think research is a great way to help develop an interest in a certain potential path and it is also very informative and helps prepare students for life in the lab. Additionally, it is very interesting and can really help give us a greater understanding on the topic.

STEM Accomplishments

Alternate for epidemiology - I participated in the HOSA epidemiology event at my high school and got 5th in the state for my event.

N/A

N/A

College Level STEM Courses Taken

AP Biology **Grade** S1:95 S2:97

AP Computer Science Principles **Grade** S1:100 S2:100

Precalculus **Grade** 100

Chemistry Honors **Grade** 100

Biology Honors **Grade** 91

Student Designation TAMS Student

Last Name Suryadevara, **First Name** Harish

UNT Email Address harishsuryadevara@my.unt.edu

High School GPA 4.0

UNT GPA 4.0

I am available for:

- I am available exclusively for 7-12 hours per week of remote research this fall and spring at the UNT-Denton Campus.
- I am available this fall and spring for UNT-Denton on-site research for 7-12 hours per week during the fall and spring semesters. (via private transportation).

Previous Research Experience

- Li Neuroimaging Lab in the Biomedical Engineering Department: Involved in the processing and analysis of neuroimaging data(fMRI, EEG) using programs such as FSL and Python. Familiar with the basics of computational neuroscience, neurobiology and computational coding.

-

Henard Molecular Biology Lab - Responsible for designing biochemical pathways for indigo synthesis in methanotrophic bacteria.

Vocational Interest

Research Physician/ MD PHD

Why do you want to do Research?

I'm interested in applying my knowledge in fields I'm interested in (molecular biology, neuroscience), and contributing to the sum of knowledge in the field.

STEM Accomplishments

TAMS Research Fair Presentation - Delivered a research presentation regarding electrographic changes following experimental traumatic brain injury.

UIL Biology State Medalist - Awarded a silver medal for knowledge in collegiate biology

College Level STEM Courses Taken

Organic Chemistry **Grade** YBT

Neuropsychopharmacology **Grade** A

Honors Biology 1+2 **Grade** A

General Chemistry 1+2 **Grade A**
Multivariable Calculus **Grade A**