

MOHAMMAD AHMAD KHAN

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EDUCATION

University of Texas at Dallas

Dallas, TX

Dual Degree – Actuarial Science and Neuroscience (Medical Concentration)

Class of 2026

- GPA: 3.856
- Member of the Hobson Wildenthal Honors College.
- Relevant Coursework: Advanced Calculus, Abstract Algebra, Statistics, Organic Chemistry.

Naperville North High School

Naperville, IL

Class of 2022

- GPA: 4.661/4
- Awarded Illinois State Scholar, National Merit Scholar, member of National Honor Society, National Latin Exam 2020 Gold Medal, State Seal of Biliteracy in Latin, State Commendation towards Biliteracy in German.

WORK EXPERIENCE

Furche Research Group, University of California at Irvine

Irvine, CA

HSOP Intern

August 2021 – Present

- Researching Kasha's rule in the field of non-adiabatic molecular dynamics by simulating and analyzing molecular motion and interaction.
- Working with Linux systems and bash scripts to perform necessary calculations and analyses on UCI computer banks.
- Currently preparing a paper for publication.

Naval Surface Warfare Center Crane

Crane, IN

SEAP Intern

June 2022 – July 2022

- Worked on adapting an NVIDIA Xavier module as a companion computer for autonomous drone navigation.
- Utilized SOLIDWORKS to modify existing designs as well as to create new parts to mount computer and sensors onto an existing quadcopter.
- Worked with MAVROS, MAVLink, and APMPlanner 2.0 to develop autonomous navigation for the quadcopter.
- Also continued work on Jackal UGV project from the previous summer.

Naval Surface Warfare Center Crane

Crane, IN

SEAP Intern

June 2021 – July 2021

- Worked with Jackal UGV autonomous robots to defuse simulated IEDs.
- Used ROS, Python, and OpenCV for computer vision and autonomous navigation routing.
- My team won the Director's Cup, the final competition at the end of the internship.

LEADERSHIP

Naperville City Council Transportation Advisory Board

Naperville, IL

Student Representative

November 2020 – May 2022

- Appointed by the board to bring the student perspective regarding transportation issues to board meetings.

NNHS Certamen Team

Naperville, IL

Captain

November 2020 – April 2022

- Coordinated team meetings, practices, and competitions during absence of teacher sponsor.
- Led team to regional win and contention for state title and arranged team participation in multiple invitational contests.

ADDITIONAL INFORMATION

Skills: Intermediate Latin and German, Graphic Design, Stock/Cryptocurrency Trading
Computer: Python, web development, C++, SOLIDWORKS/CAD Modeling, ROS, GitHub
Clearance: DoD Secret-level
Interests: Rugby, Language Acquisition, Personal Fitness