Krishnan Shankar

Computer Engineering @ UIUC

krishnans2006@gmail.com
703-559-0131
Falls Church, VA
linkedin.com/in/krishnan-shankar
github.com/krishnans2006
krishnan.web.app

EDUCATION

University of Illinois at Urbana-Champaign — Expected Graduation May 2027
Bachelor of Science in Computer Engineering — Illinois GPA: **4.00**

Thomas Jefferson High School for Science and Technology — Graduated June 2024
Fairfax County Public Schools, Advanced Studies Diploma — Weighted GPA: **4.467**

- Relevant Courses: Artificial Intelligence (AI 1 & 2), Machine Learning (ML 1 & 2), BC Calculus (Calculus 1 & 2), Multivariable Calculus (Calculus 3), Engineering Research, Robotics, Electronics, AP Computer Science A+
- Test Scores: **1500/1520** PSAT (10/2022), **1560/1600** SAT (03/2023), **36/36** ACT (10/2022)

WORK EXPERIENCE

The MITRE Corporation - *Student Researcher*
JUN 2023 - PRESENT

- Automated creating, configuring, and testing characteristics of complex 5G network simulations
- Used this to research the effectiveness of methods for integrating non-5G devices with 5G core infrastructure
- Built a 5G proxy on a Raspberry Pi and successfully integrated it with Serial Streaming Telemetry (SST) data from UAVs. This enables fast transfer of flight telemetry, over long distances, using 5G (cellular) technology.

EXTRACURRICULAR ACTIVITIES/LEADERSHIP

TJ Computer Systems Lab (CSL) - *Lead Sysadmin*
JUN 2021 - PRESENT

- Managing and adding to the TJ Intranet, a school-wide hub used for club signups, free printing, bus spots, etc.
- Developing and currently responsible for Turn-In, a site used by every computer science class at Thomas Jefferson High School to automate collecting and grading student code submissions
- Configured and responsible for a high-availability, 3x-replicated network filesystem used by students and teachers to store their files. Migrated all data and services to the new filesystem for speed and reliability.

TJ Unmanned Aerial Vehicle (UAV) - *Club President*
FEB 2021 - AUGUST 2024

- Led a team to compete in the SUAS Competition, a prestigious international UAV competition
- Designed and integrated a communications system using three radios and frequencies (900MHz, 2.4GHz, 5GHz) for safe and reliable flight control (both autonomous and manual) and fast image transfer
- Developed a GroundStation (Python Flask, React) from scratch that monitors and controls Ardupilot planes, capable of handling telemetry and flight control, object detection/classification, and accurate payload drop
- Built and tested many flight simulations using parameter files and Ardupilot's Software-In-The-Loop program

HackTJ - *Technical Lead*
JUN 2021 - JULY 2024

- Maintained the website (Svelte) for the original largest HS hackathon, with 400+ hackers yearly
- Developed a judging system (Python Flask, Firestore) from scratch to judge and evaluate projects fairly