

AMIT L. KRISHNAIYER

Vienna, VA, 22180 • (703) 300 2695 • amit.krishnaiyer@gmail.com • amitkrishnaiyer.com

EDUCATION

University of Illinois at Urbana-Champaign

Class of 2025

Bachelor of Science in Mathematics & Computer Science, Minor in Astronomy

- **GPA:** 4.0/4.0
- **Relevant Coursework:** Discrete Structures, Statistics and Probability 400, Introduction to Astrophysics, Computing in Astronomy, Graph Theory, Nonlinear Programming, Introduction to Algorithms, Database Systems

Thomas Jefferson High School for Science and Technology

Class of 2022

- **Relevant Coursework:** Data Structures, Multivariable Calculus, Linear Algebra.

WORK EXPERIENCE

Chicago Trading Company, Incoming Software Engineering Intern

May 2024

John Deere, Data Science Intern

May 2023 – December 2023

- Using **SQL**, **pandas**, and **statistical models**, worked in a team of 6 to create a non-invasive advanced sensing model that can predict different soil properties, which will lead to higher crop yields for farmers.
- Focused on **data cleaning** and **correlation techniques** to pinpoint relevant variables and bolster model accuracy.

HireLogic, Natural Language Processing Intern

July 2022 – August 2022

- Employed **Natural Language Toolkit (NLTK)** and **sckit-learn** to identify and separate relevant questions from small talk in an interview transcript.
- Achieved a novel 87% accuracy using **Support Vector Machines** in my model- which is directly used in HireLogic's pilot AI that judges a candidate's interview performance.

Boston University, Student Researcher

March 2020 – August 2021

- Utilized a Software Defined Radio (SDR) and reverse-engineering tools like **GNU-Radio** and **Inspectrum** to create a program to extract information from **Amazon Sidewalk** waves.
- Research led to a velocity-measuring radar that uses **5 magnitudes** less bandwidth than a traditional sensor.
- Presented at BU RISE Program & New England Workshop on SDR 2021 conference.

Corsha, Test Automation Intern

July 2020 – August 2020

- Revitalized **test automation infrastructure** for the API security company.
- Orchestrated the production of **automated scripts** in **bash** that tested their **Distributed Ledger Network (Blockchain)**.
- Leveraged **Jenkins** to verify test script functionality and **Docker** to run scripts.

EXTRACURRICULARS/PROJECTS

HackIllinois 2023 1st Place Winner, John Deere Track

February 2023

- HackIllinois is UIUC's premiere collegiate hackathon, with **750 participants** competing from Midwest universities.
- In a team of four, we created a full stack web-app that can categorize images and descriptions of trash into separate categories: glass, compost, recyclables, hazardous waste, metals, and residual waste.
- I utilized **AWS S3** to store and access large datasets/models, and **yolov8/neural networks** to train our image classifier to detect general objects. Also used **AWS EC2** to minimize overload on personal laptop.

Illini Blockchain, Developer Lead

January 2023 – (Present)

- Earned sponsorship by DevHub to represent Illini Blockchain in a hackathon at **NEARcon 2023 in Lisbon**, where I built a PvP game that operates with NEAR.
- Leading a team of 6 to develop an open-source monetization protocol on **Etheruem**, using **React**, **Flask**, and **Solidity**.

Automated Video Assistant Referee for Soccer

August 2021 – May 2022

- Automated the process of determining whether a player is offsides. Presented at tjSTAR to **1000+ students**.
- Used **PyTorch** to train my own custom ball detection model, **OpenCV** to identify players, **k-means** to sort players by team, and **matplotlib** for goal-line detection.

HONORS/SKILLS

- **Languages:** Python, C++, Java, Typescript, Node.js, SQL (Proficient), Bash, R, Solidity, Swift (Comfortable)
- **Tools:** PyTorch, Natural Language Toolkit, Selenium, Github, Amazon Web Services, React, MongoDB (Proficient)
- **Other Honors:** TEDxTJHSST talk, 7 on **AIME 2020**, James Scholar (Top 12% of UIUC students), Eagle Scout (Patrol Leader for 5 years), Research Park Hackathon 2023 2nd place (out of 50 students), Illinois Consulting Group Consultant