# AMIT L. KRISHNAIYER

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## EDUCATION

**University of Illinois at Urbana-Champaign**                                                    Class of 2025
*Bachelor of Science in Computer Science & Mathematics, Minor in Astronomy*
- **GPA:** 4.0
- **Relevant Coursework:** Discrete Structures, Statistics and Probability 400, Fundamental Mathematics.

**Thomas Jefferson High School for Science and Technology**                          Class of 2022
- **Relevant Coursework:** Data Structures, Multivariable Calculus, Linear Algebra.

## WORK EXPERIENCE

**HireLogic,** *Natural Language Processing Intern*                                    July 2022 – August 2022
- My work is used in HireLogic's new software that analyzes a candidate's performance in an interview.
- Employed **Natural Language Toolkit (NLTK)** and **sckit-learn** to identify and separate relevant questions from small talk in an interview transcript, so that only the candidate's responses to relevant questions are graded.
- Achieved a novel 87% accuracy in sorting interview questions using **Support Vector Machines** in my model.

**Boston University,** *Student Researcher*                                           March 2020 – August 2021
- Researched under Professor David Starobinski (ECE) + team– results have future implications in autonomous vehicles.
- 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.
- The research created a distance/velocity-measuring radar that uses **5 magnitudes** less bandwidth than a traditional sensor with the same accuracy.
- Presented at BU RISE Program & New England Workshop on SDR 2021 conference.

**Codice,** *Test Automation Intern*                                                  June 2021 – August 2021
- Improved Codice's test automation infrastructure for their healthcare billing webapp.
- Verified the functionality of a variety of features– from calculations of total costs to downloading reports.
- Wrote 300+ test scripts in **Selenium–** utilized **Jira** to track progress.

**Corsha,** *Test Automation Intern*                                                  July 2020 – August 2020
- Improved Corsha's test automation infrastructure (on the backend). Corsha is an API security company.
- Wrote automated scripts in **bash** that tested Corsha's **Distributed Ledger Network (Blockchain).**
- Used **Jenkins** to verify that the test scripts work and **Docker** to run scripts.

## EXTRACURRICULARS/PROJECTS

**HackIllinois 2023 1st Place Winner,** *John Deere Track*                             Feburary 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,** *Smart Contract Developer, Incoming Developer Lead*            January 2023 – (Present)
- Utilized **Solidity** and **Typescript** to create a decentralized application that crowdsources donations of Ethereum to charities.
- Published an article about Crypto Academy Blockchain Class on Illini Blockchain's Medium.

**Automated Video Assistant Referee for Soccer**                                      August 2021 – May 2022
- Automated the process of determining whether a soccer player is offsides (from a video of play).
- 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**: Java, Python (Proficient), C++, Bash, Node.js, R (Comfortable), Swift (Familiar).
- **Tools:** PyTorch, Natural Language Toolkit, Selenium, Github, Amazon Web Services (Proficient), XGBoost (Comfortable)
- **Other Honors:** James Scholar (Top 12% of UIUC students), Eagle Scout (Patrol Leader for 5 years), TEDxTJHSST talk (to be uploaded in summer 2023), Illinois Consulting Group Staff Consultant (September 2022 – Present), Incoming Data Science Intern at **John Deere** (Summer 2023)