Arpan Laha

arpanlaha99@gmail.com | alaha2@illinois.edu
1285 Dunbarton Drive, Aurora IL 60502
(630)-470-0648

Profiles

LinkedIn: linkedin.com/in/arpanlaha
GitHub: github.com/arpanlaha

Education

University of Illinois at Urbana-Champaign

- B.S. in Computer Science (May '21)
- GPA: 3.96 | Technical GPA: 3.96
- Minor in Mathematics

Skills

Programming Languages

TypeScript/JavaScript, C, C++, Python, Java, R, SQL, C#, Racket

Tools & Frameworks

React, Next, Redux, Electron, Express, Flask, PostgreSQL, MongoDB, Neo4j, scikit-learn, scikit-image, OpenCV, Git

Coursework

Data Structures, Algorithms and Models of Computation, Systems Programming, Applied Statistics, Computer Architecture, Database Systems, Applied Machine Learning

Awards & Honors

College

- Chancellor's Scholar
- Engineering James Scholar
- Dean's List

High School

- National Merit Scholar
- Presidential Scholar Candidate
- National AP Scholar
- Illinois Seal of Biliteracy (Spanish)

Work Experience

Microsoft • Software Engineer Intern (Summer 2019)

- Designed tool to verify Azure SDK guideline adherence during development
- Built ESLint plugin in TypeScript, enforcing rules with a focus on modularity
- Delivered multiple releases and iterated on plugin using team's feedback

UChicago Computation Institute • Intern (Summer 2018)

- Dynamically modelled Chicago's air quality and its determinants
- Processed and analyzed data sources with Python, R, Geoda, and QGIS
- Visualized data sources through single dashboard for public use

Fermilab • Intern (Summer 2017, Summer 2016)

- **2017:** Designed and implemented pattern recognition algorithm in C++ for Mu2e's event classifier, reducing runtime threefold and preserving accuracy
- **2016:** Devised neural network-based method to select optimal result from multiple pattern recognition algorithms in Mu2e experiment

Extracurricular Experience

Hack4Impact • Product Manager (2019)

- Designed and delivered applications, leading team to ensure development best enhanced clients' and user's outcomes in various social good sectors
- Aided developers in learning and using application technologies - React, Redux, Flask, PostgreSQL, Box API, Electron, OpenCV, scikit-image
- **Spring – Kiva:** built a web app streamlining Kiva's partner accreditation, consolidating multi-platform communication into a single portal
- **Fall – UIC:** created a cross-platform desktop app helping spinal surgery lab technicians visualize patient progress from post-op and recovery x-rays

Hack4Impact • Software Developer (Fall 2018)

- Developed web app for Child's Play Charity to match hospitalized children with video games to use as therapy for various ailments
- Utilized Flask and PostgreSQL to store/access information about supported video games and fetch information about games using Giant Bomb's API

Reflections | Projections • Marketing (2018, 2019)

- Coordinated marketing efforts for student-run tech conference, contributing to 50% increase in attendance from the previous year

Projects

Harmonizer: A tool (C++, ported to Python) to harmonize an audio input which generates its chord progression and synthesizes harmonized audio