

Arpan Laha

Profiles

GitHub: github.com/arpanlaha

LinkedIn: linkedin.com/in/arpanlaha

Website: arpanlaha.com

Education

University of Illinois at Urbana-Champaign

- › B.S. in Computer Science (May '21)
- › GPA: 3.97 | Technical GPA: 3.97
- › Minor in Mathematics
- › Chancellor's Scholar

Skills

Languages

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

Frontend

React, Next, Gatsby, WebGL, WebAssembly, Redux, Electron

Backend

Node.js, Express, actix-web, Django, Flask, PostgreSQL, MongoDB, Neo4j

Cloud

Vercel/Zeit, Azure App Service, Azure Functions, AWS Lambda

Miscellaneous

scikit-learn, scikit-image, OpenCV, ESLint, Git, GeoDa, QGIS

Coursework

Systems Programming, Algorithms & Models of Computation, Programming Languages and Compilers, Database Systems, Applied Machine Learning, Data Structures, Web Programming, Numerical Methods, Audio Processing, Applied Statistics, Virtual Reality

Work Experience

Microsoft | Program Manager Intern (Summer 2020)

- › Investigated opportunities for deploying Flask and Django on Azure Functions and adjacent serverless solutions offered by Azure

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

Fermilab | Intern (Summer 2017)

- › Designed and implemented pattern recognition algorithm in C++ for Mu2e's event classifier, reducing runtime threefold and preserving accuracy

Extracurricular Experience

Hack4Impact | Co-Director (Spring 2020-Present)

Hack4Impact | Product Manager (2019 – Spring 2020)

- › Designed and delivered applications, leading team to ensure development best enhanced clients' and user's outcomes in various social good sectors
- › **Spring 2020 – Kids Save Ocean:** a platform for kids to design sustainability solutions while serving as a community to gain inspiration from others
- › **Fall 2019 – UIC:** a cross-platform desktop app helping spinal surgery lab technicians visualize patient progress from post-op and recovery x-rays
- › **Spring 2019 – Kiva:** a web app streamlining Kiva's partner accreditation, consolidating multi-platform communication into a single portal

Hack4Impact | Software Developer (Fall 2018)

- › Developed web app for Child's Play Charity to match hospitalized kids with video games as therapy for various ailments, utilizing Flask, PostgreSQL, and the Giant Bomb API to manage information about video games

Side Projects

[Harmonizer](#) (web app) | Harmonizes uploaded melodic audio files and synthesizes the harmony's audio to for playback alongside the melody

[Spectrum](#) (website) | Generates random art using WebAssembly with Rust and WebGL, rendering three ways to show strengths of each approach

[Vault](#) (web app) | Visualizes crates.io package dependency graphs with an interactive graph viewer populated with live data from daily registry dumps