

Saakshaat Singh

SOFTWARE ENGINEER · PROJECT MANAGER

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Education

University of Massachusetts, Amherst

Amherst, Massachusetts

B.S. IN COMPUTER SCIENCE AND MATHEMATICS

Sept. 2019 - Present

- **GPA: 4.0 | Honors | Dean's List**
- Recipient of the **Chancellor's Award** and **Dean's International Scholarship**
- **Coursework:** Data Structures, Discrete Math, Programming Methodologies, Reasoning under Uncertainty, Calc 2, Multivariate Calc, Linear Algebra

Skills

Languages Python, Java, C++, Ruby, JavaScript, Bash, HTML, CSS, YAML

Frameworks Ruby on Rails, Express.js, React.js, FastAPI, Kivy

Software Engineering Docker, NoSQL, Object Relational Mapping, MVC Architecture, Package Engineering, OOPS, VCS, Agile

Web Development AWS (**EC2**, **RDS**, **S3**), Google Cloud Platform, Firebase, Node.js, REST, Service Workers

Work Experience

Center for Youth Engagement

Amherst, Massachusetts

SOFTWARE ENGINEER

Jun. 2020 - Present

- Architected organization-wide **backend packages** in Python reducing redundant code by **25,000+ lines**, boosting development cycles by weeks and centralizing a robust backend codebase for future projects
- Engineered python server, hosted on **AWS EC2**, **RDS** and **S3**, for providing backend functionality to over 50 iPad client applications an NSF research program involving children in juvenile detention
- Developed a full stack system using **python** and **react.js** for data analysis on multiple research programs by parsing surveys and containerized and deployed it using **Docker** and AWS

Cargill Pvt. Inc.

Gurgaon, India

CORPORATE SOCIAL RESPONSIBILITY INTERN

Apr. 2019 - Aug. 2019

- Spearheaded CSR representatives throughout India in 6 locations for volunteer projects leading to accelerated employee participation by **20%**
- Audited NGO partnerships and prepared ROI analysis, leading to the creation of a **review based pipeline for logistics reporting** across India
- Launched company-wide fundraiser for recycling pen waste with NGO partner to support **2,000+ children** in poverty through upcycled stationary

Extracurricular

UMass Association for Computing Machinery

Largest tech club in Western Mass.

VICE CHAIR

Jan. 2020 - Present

- Leading our groups through our strategic roadmap and developing infrastructures to support their executive boards manage their activities
- Established a marketing team augmenting member growth from **200 to 600+** winning the ACM global award for **Best Recruitment Program**
- Founded ACM ICPC and Blockchain groups, latter led by Bitcoin co-founder **Gavin Andresen**

UMass Developer Student Club

Chapter of Google DSC

OPEN SOURCE DEVELOPER

Feb. 2020 - Present

- Advancing open source technologies for the common good through a network of DSC developers across campuses
- Inventing a platform for optimizing onboarding through project matching as a **stable marriage** problem in collaboration with **DSC UIUC & NTU**

Projects

stocksmith open source developer packages for automated stock analysis using ML & NLP | *founder*, **package engineering**, **PyPI**

project-matching platform for matching club members to projects through stable marriage | *founder and core-maintainer*, **ruby on rails**, **DSC**

dequarantine HackQuarantine COVID hack for online social events platform | *tech lead* for 7 devs from 4 countries, backend, **FERN**, agile

memories full stack social media platform just for my friends built using **Firebase**, **Express** and **React & Redux**

sahayak functional **voice assistant** in Python which can search using **selenium**, do math with **Wolfram Alpha**, send emails and open apps