BHAKTI SHAH
shahbhakti21@gmail.com | (312)-533-0775 | github.com/bhaktishh

LANGUAGES

Assembly (x86-64)	C
Coq/Gallina	Haskell
Java	JavaScript
Lean	OCaml
Python	R
Rust	Scala
SQL	TypeScript

LEADERSHIP

WeBring: *December 2020*
https://github.com/bhaktishh/WeBring
Winning project at a hackathon. **Team Leader**. Built a service that allowed elderly individuals to request services via **SMS**, using **Twilio.**

Interstell<her> Hackathon:
February 2021
Mentored elementary and middle school girls for an app development hackathon over the course of two days.

stories@CAJCS: *April 2019 – December 2019*
Founder and Organizational Head of an **annual event** aimed at highlighting individuals in **non-conventional career fields**.

TEACHING

Virtual Introduction to Programming course: *June 2020*
Designed and conducted a course for children aged 6-9. Primarily in **Scratch**.

Coding4Youth: *June 2021 – August 2021*
AP Java and **Mathematics** tutor.

Teaching Assistant/Grader:
CMSC 16100 [Honors Introduction to Computer Science I] *Fall 2021*.
CMSC 11111 [Creative Coding] *Winter 2022*.
CMSC 15200 [Introduction to Computer Science II] *Spring 2022*.
CMSC 27100 [Discrete Mathematics] *Fall 2022*.
CMSC 14200 [Introduction to Computer Science II] *Winter 2023*.

Course Assistant: **CMSC 22300** [Functional Programming] *Fall 2022*.
Provided feedback and beta tested potential assignments.

INTERESTS

Playing and watching soccer
Creating art
Playing the piano

EDUCATION

The University of Chicago   Chicago, IL
B.S. Computer Science (Declared)   June 2024
GPA: 3.75/4.00

SELECTED WORK EXPERIENCES

Amazon Web Services (AWS) [http://aws.amazon.com/]   East Palo Alto, CA, US
Software Development Engineer Intern   June 2022 – September 2022

- Transitioned the **logging system** for a backend dependency of the **AWS Global Console** to a more robust and accessible platform. Made **configuration changes** that **improved latency** and **ease of use** for all service teams across the Console.
- Wrote **holistic end to end tests** in **TypeScript** using the **Jest** framework for the same backend service, allowing a transition from slower, manual deployments to **faster, automated deployments** for a **high priority service**.

Bankuish [www.bankuish.com/]   Chicago, IL, US
Android Development Intern   April 2021 – June 2021
- Built the learning component of the **Android** application Bankuish in **Java.**
- Utilized the **YouTube API** to display content dynamically.

Computer Science Instructional Laboratory [csil.cs.uchicago.edu/]   Chicago, IL, US
Systems Administrator   March 2021 – Present
- Assisting members of the computer science community with their technical needs.
- Head of Inventory and Scheduling, responsible for 5 computer labs and ~30 staff members.

Sameeksha Capital [sameeksha.capital]   Mumbai, MH, IN
Intern   July 2020
- Built software that compiled data about company executives' interviews **dynamically**.
- Scraped web data in **Python**, utilizing the **Selenium webdriver API**.
- Stored data using the **Pandas** library and **pickling** for efficiency.

Heckyl Technologies [http://heckyl.com/]   Mumbai, MH, IN
Intern – Java Team   June 2019
- Built software that compiled data from regulatory sites and documents.
- Scraped web data in **Java**, utilizing the **HTMLUnit** browser and **PDFBox** library.
- Stored data in a **MySQL cloud database**, using **SQL** commands.

SELECTED PROJECTS & RESEARCH

tree-house   March 2022 – June 2022
Worked on a code editor focused on **direct manipulation programming system**s in **TypeScript**. Based on *Sketch-n-Sketch*. Under guidance of Ravi Chugh, Associate Professor, University of Chicago.

Chicago Quantum and Programming (Languages) Lab   April 2022 – Present
https://chiqp.cs.uchicago.edu/
Worked on **formal verification** of a **quantum programming library**. Currently working on translations between **Lean and Coq** theorem provers. Under guidance of Robert Rand, Assistant Professor, University of Chicago.

ucopendata   January 2021 – December 2021
https://github.com/UCOpenData
Analyzing the impact of remote learning on student sentiments, using web-scraping in **Python,** utilizing **Pandas, BeautifulSoup,** and **Selenium**.

Human-Robot Interaction Lab (HRI Lab)   February 2021 – March 2022
https://hri.cs.uchicago.edu/index.html
Exploring the impact of the presence of **robots** in relation to **fostering deep conversations** between individuals. Under guidance of Sarah Sebo, Assistant Professor, University of Chicago.

Pediatric Cancer Data Commons (Volchenboum Lab)   June 2021 – September 2021
https://commons.cri.uchicago.edu/pcdc/
Research Assistant with the PCDC. Working with an **expert data analyst** to **map data dictionary terms**. Under guidance of Samuel Volchenboum, Associate Professor, University of Chicago.