BHAKTI SHAH

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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.