

# BHAKTI SHAH

[shahbhakti21@gmail.com](mailto:shahbhakti21@gmail.com) | (312)-533-0775 | [github.com/bhaktishh](https://github.com/bhaktishh)

## SELECTED SKILLS

### Languages, Frameworks, & Technologies

Assembly (x86-64)	C
Coq	Git/SVN
Haskell	Java
JavaScript/TypeScript	Node.js
Python	R
React	SQL

## 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 middle school **mathematics tutor**.

TA: **CMSC 11111** [Creative Coding] *Winter 2022*.

Grader: **CMSC 16100** [Honors Introduction to Computer Science II] *Autumn 2021*.

Grader: **CMSC 15200** [Introduction to Computer Science II] *Spring 2022*

## INTERESTS

Playing and watching soccer  
Creating art  
Playing the piano

## EDUCATION

### The University of Chicago

*B.S. Computer Science (Declared) & B.S. Mathematics (Declared)*

Chicago, IL

**GPA: 3.69/4.00**

June 2024

## 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/](http://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/](http://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/](http://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 – Present

Developing a code editor focused on **direct manipulation programming systems** in **TypScript**. Based on [Sketch-n-Sketch](#). Under guidance of Ravi Chugh, Associate Professor, University of Chicago.

### ChiQP lab

April 2022 – Present

<https://chiqp.cs.uchicago.edu/>

Working on **formal verification** of a **quantum programming library**. Optimizing quantum padding proofs in **Coq**. 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.