# Harshitha Akkaraju

Software engineer with a background in full stack development and data analysis. Seeking SDE Internships for Summer 2019.

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#### **EXPERIENCE**

#### Undergraduate Researcher

Momentary Experience Lab, UW College of Engineering October 2018

- Contributed to the design and development of a social robot; expanded the robot's functionality by designing and implementing a voice interaction model through an Alexa skill.
- Established the data pipeline for momentary data collection through the Alexa skill.
- Technologies: Alexa SDK, AWS, Node.js, Python

## Undergraduate Researcher

Code and Cognition Lab, UW Information School

October 2018

- Applied agile design and development principles to develop research prototypes.
- Built an internal web tool to accelerate the pace of curriculum creation on a programming tutor.
- Contributed to a research study, performed qualitative and quantitative analysis and co-authored a paper accepted to the SIGCSE conference.
- Technologies: Node, React, Express, Python, Firebase Database, SASS

## Undergraduate Researcher

Taskar Center, Allen School for CS

April 2017 - June 2018

- Developed the workflow for aggregating data from multiple datasets from the Seattle Open Data Portal.
- Wrote Python scripts to map the multiple datasets to sidewalk data obtained from AccessMap™, an accessible pedestrian trip planner.
- Designed a database schema and populated a MySQL database with sidewalk data along with other aggregated data.
- Technologies: Python, SQL, MySQL, Rest APIs, Mapbox

## **PROJECTS**

Koconut – Design and Development

Ongoing

- Designed and developed a web tutor that uses Bayesian Knowledge Tracing to help novices learn introductory programming concepts.
- · Technologies: Node, React, Firebase, Express, Material-UI, Jest, Flow, Git

Mesh - Development

Ongoing

- Implemented a Naïve Bayes Classifier, a machine learning technique to detect spam messages.
- Technologies: Python, Git

Tic Tac Toe - Design and Development

August 2018

- Built an Al based tic tac toe game that implements the minimax algorithm to play against the human player.
- · Technologies: Vue, Heroku, Git

Ohana — Interaction Design and Development

June 2018

- Designed and built a dynamic chore manager for both as an Alexa Skill and a web app.
- Technologies: Node, React, AWS Lambda, AWS S3, Firebase, Alexa SDK, Git

## **EDUCATION**

### University of Washington

Bachelor of Science in Informatics Concentration in Software Engineering and Human Computer Interaction

Informatics is the combined study of Systems design, project management and computer science.

Graduating December 2019, 3.6 GPA

#### **SKILLS**

Front-End Development HTML, CSS, JavaScript ES6, React, Redux, Vue, SASS

Back-End Development NodeJS, Java, Python, C

Data Wrangling & Viz Python, R, REST APIs, Mapbox, Power BI

Quality Assurance Testing JUnit (Java), Jest (JS), unittest (Python)

Database Technologies Microsoft SQL Server, MySQL, Postgres, Firebase

#### **Processes**

Algorithmic thinking, Problem solving, Unit testing, Agile, Version Control, Requirements engineering, Design thinking, Research, Independent learning

#### LEADERSHIP

Outreach Program Director

UW Society of Women Engineers
Conducted outreach events to expand
the image of technology as a rewarding
career choice for 100+ undergraduates
and K-12 students.

Director of Diversity

Women in Informatics

Planned the 7<sup>th</sup> Annual WINFO

Hackathon, organized company tours,
networking events and facilitated
conversations about diversity in
technology.