# 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

October 2018 - Present

Momentary Experience Lab, UW College of Engineering

- 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

June 2018 - Present

Code and Cognition Lab, UW Information School

- 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

April 2017 - June 2018

Taskar Center, Allen School for CS

- 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

# NASA Arctic – Boreal Vulnerability Project

Ongoing

- Automated workflows for analyzing airborne and field data from the Butman lab's Arctic field campaign.
- · 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, Bootstrap, Material-UI

Back-End Development NodeJS, Java, Python, C

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

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

Database Technologies Microsoft SQL Server, MySQL, Postgres, Google 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.