# Simran Bagaria

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### **Education**

**EXPECTED GRADUATION: JUNE 2025** 

# B.S. Computer Science, University of Washington - Seattle

- GPA: 3.92
- Relevant coursework: Machine Learning, Natural Language Processing, Computer Vision, Distributed Systems, Databases, Systems
   Programming, Data Structures and Algorithms

# **Experience**

JUNE 2024 - PRESENT

### Software Engineering Intern / J.P. Morgan Chase Bank, Seattle, WA

- Working on application for Commercial Real Estate Loans (CREOS team)
- Using Spring, Java, React.js to create new photo upload mobile application and integrate with existing application

MARCH 2024 - PRESENT

## Undergraduate Research / WEIRD Lab, University of Washington - Seattle

- WEIRD: Washington Embodied Intelligence and Robotic Development
- Researching how to train policies in simulation and transfer them to the real world
- Projects involving training a robotic hand (LEAP Hand) to perform complex tasks such as hammering
- Gaining extensive experience using PyTorch to train deep reinforcement learning algorithms such as SAC and PPO

SEPTEMBER 2023 - DECEMBER 2023

### Teaching Assistant / CSE 351, University of Washington - Seattle

- CSE 351: The Hardware/Software Interface
- Teaching 30+ students weekly about concepts including data representation, caching, and virtual memory

### **Projects**

APRIL 2024 - JUNE 2024

### **Distributed Key-Value Store**

- Final Project for Distributed Systems
- · Built sharded, linearizable key value store with dynamic load balancing and atomic multi-key transactions

JANUARY 2024 - MARCH 2024

### StrategyQA NLP Project

- StrategyQA dataset containing questions involving implicit reasoning and answers
- Worked in group of 3 to design and implement full pipeline to answer implicit reasoning questions
- Used ML/NLP skills to use PyTorch and Huggingface models to generate predictions for questions
- Submitted to <u>Allen AI Leaderboard</u> and achieved 12<sup>th</sup> place in SARI score category among over 200 submissions

OCTOBER 2023 - OCTOBER 2023

#### **IP Morgan Chase Code for Good Hackathon**

- Full-stack application for Rebuilding Together Aurora, an NPO geared towards providing home repairs for people in need
- Worked in team of 7 people to build fully functional app in 22 hours
- Used Express.js, Node.js, MongoDB to build REST API, React.js for front-end

AUGUST 2023 – PRESENT

# 3 Steps

- · Calculus Learning platform featuring unlimited practice problems for each topic
- Live Demo: <a href="https://simbag04.github.io/3-steps-client">https://simbag04.github.io/3-steps-client</a>
- Used Express.js, Node.js, MongoDB, React.js, REST API, d3.js

#### **Skills**

Java, Python, PyTorch, C++, C, SQL, JavaScript, MongoDB, Express.js, React.js, Node.js, HTML, CSS, Git