SUJAL BOLIA

EDUCATION

University of British Columbia, Vancouver, BC

Bachelor of Science (Computer Science) | 2024

WORK EXPERIENCE

Software Engineer Intern | Microsoft

May-August 2022

Virtual internship under mentorship of Dr. Manoj Chinnakotla

- Developed Discord bot in Rust to host text-based Werewolf games using Discord API
- Converted Markdown input into HTML and used wkhtmltopdf to convert the HTML into PDF
- Used Fandom API to search for wiki articles, parsing raw REST responses

Software Engineer Intern | Microsoft

May-August 2021

Virtual internship under mentorship of Dr. Manoj Chinnakotla

- Developed command-line tool to extract images from compressed assets
- Optimized code by parallelizing performance-sensitive routines and removing unnecessary cloning, gaining a 10x speed improvement over existing tools

PROJECTS

peerAdvice (hackathon)

Jan 2023

- Designed website to connect years 1 & 2 UBC students with years 3 & 4 students to provide peer-to-peer advice, using Python library Flask
- Integrated Firebase auth and Calendly calendars to improve user experience
- Worked in team of 4 to create the project in less than 24 hours for nwHacks 2023

Course Explorer (Course Project)

Apr 2023

- Created API server in TypeScript allowing users to add and query school course data
- Designed Discord bot frontend in TypeScript to view the data on Discord

serenity-utils

Aug 2020-Jul 2022

- Developed an asynchronous Rust library to offer utility functions supplementing the serenity-rs Discord API library
- Ensured robustness and reliability by implementing a comprehensive unit testing

wordle-cli

Dec 2022

- Wrote a clone of the word game Wordle in Rust with a terminal-based user interface
- Allowed users to supply their own list of words and guesses as JSON files
- Parsed user configuration options & previous results to keep track of their progress

VOLUNTEER EXPERIENCE

Rotary Club, Udaipur, India

Jul 2017–Jan 2020

• In a team of 4, coordinated Rotary Club service projects such as blood donation camps and education awareness drives

SKILLS

Rust, Python, TypeScript, Java, C, C++, C#, .NET, Go, PostgreSQL, MySQL, Oracle, MongoDB, Redis, MATLAB, R, Visual Studio Code, IntelliJ, GDB/LLDB, JUnit, Mocha, HTML, CSS, JavaScript, React, NodeJS, PHP, Flask, AWS, Azure, DynamoDB, Docker, Kubernetes, ETL, ELT, Spark, Kafka, Mesos, GraphX, Full Stack