Raghav Jhavar

EDUCATION

SOFTWARE SKILLS

University of British Columbia, Okanagan B.S. in Computer Science 2017-2021

B.S. in Computer Science 20 3.60GPA (CS: 88%, Overall: 80%)

3rd year • Dean's list

St. Andrews International School, Bangkok International Baccalaureate 2015-2017

Languages Go, Java, Python, PHP, C#, JavaScript Certifications

React / Redux (Udemy)

Elixir & Phoenix Framework (Udemy)

Interests Web development, Distributed systems, Machine learning

WORK EXPERIENCE

University of British Columbia, Okanagan

Undergraduate Digital Assets and Technology Assistant

Kelowna, Canada September 2019 – April 2020

- Writing Python software to digitize Okanagan (a region in British Columbia, Canada) history into a public repository.
- Testing and modifying automated metadata conversion processes (CSV to XML) and developing technical documentation for management of repositories.
- Writing concurrent object-oriented python code, quality assurance, building executable applications, requirements gathering and refactoring existing applications. Software includes PyQt, BeautifulSoup, Selenium and RoboBrowser.

University of British Columbia, Okanagan

Undergraduate Teaching Assistant (TA)

Kelowna, Canada September 2018– August 2019

- Picked from a sizeable pool of students to be a TA for two first year computer programming courses (Intro to Programming I and Intro to Programming II) taught in Java.
- Marked over 1000 unique assignments (including debugging and finding errors) and midterm exams.
- Achieved an average TA rating of 4.51/5.00 on teaching performance, communication and knowledge.

University of British Columbia, Okanagan

Research Assistant

Kelowna, Canada February 2018 – June 2018

- Created a tool to scrape all courses (including prerequisites, corequisites, credits, equivalency, etc.) at UBC in Java generating all 2000+ courses & 66 disciplines in XML format.
- Made the tool multithreaded which lead to a \sim 50% reduction in scraping time.
- Used Java's built-in HttpURLConnection class and JSOUP (a Java library to parse and extract data from HTML).
- Wrote JavaScript to make all the course data available in JSON for front-end developers to use.

nwHacks Hackathon (Western Canada's largest hackathon)

Programmer (Team member)

Vancouver, Canada January 2019

- Wrote a Java program to read.ics (calendar) files and identify students' schedule for the current semester.
- Used the data to identify overlapping available slots, to schedule group study sessions.

PERSONAL PROJECTS

- Http server: Wrote a fully operational HTTP server in Java using the HTTP/1.1 protocol including content encoding (compression)
- **ProxyGG**: Wrote a website in React/Redux using Golang for the backend and PostgreSQL for the database. Golang for the scraper too.
- Captcha solver: Software to solve captchas using Computer Vision.
- **Indoor navigation**: Working on software to allow for indoor navigation at my university.
- Wrote a **rotating proxy** in Java. Picks a random proxy from a pool and uses it to relay requests.

- Basic Java program to generate a target string using a genetic algorithm to understand fundamental concepts.
- Created a website (proxy.gg) that scrapes and check proxies from all over the internet and lists them. Wrote a C# library to consume the RESTful API. 100s of visitors daily.
- Wrote software to **sort groups of students into rooms on a residential trip**. The script took into account student preferences to create the groups.
- Wrote software that gathered thousands of recipes online and then a **RESTful API** to query them based on ingredients available.