

Trishala Bhasin

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SKILLS

Programming Languages: Javascript, Typescript, Python, HTML/CSS, SQL, UML, Java, C++

Tools and Frameworks: React, Redux, React Native, Node, Flask, Django, Postman, Git, REST/GraphQL

Databases and Cloud: PostgreSQL, MySQL, MongoDB, AWS, AWS Lambda, Azure

EXPERIENCE

Full-Stack Javascript Developer, *Semios Bio.*, Vancouver, BC

Sep 2021 - Nov 2022

- Designed and developed front-end using **React** (React 18.1) and mobile components using **React Native**, and **Redux** for agriculture technology applications used by farmers to manage their fields.
- Integrated data coming from 285,000 IoT devices into the web app by making **REST** and **GraphQL** API calls, schema validations, API tests, and embedding SQL queries to get data from a **PostgreSQL** database.
- Collaboratively developed a monorepo for our app migration from **Javascript** to **Typescript** which included re-writing REST and GraphQL endpoints, **AWS lambda** functions, and code refactoring.
- Remodeled the data coming from the data layer which was earlier accessed through 87 REST endpoints and GraphQL queries to be effectively fetched by 2 REST endpoints reducing latency by 20%.
- Mentored a co-op student by creating **JIRA** tickets and code reviews.

Software Developer, Full-Stack, *Skio Music*, Vancouver, BC

Jul 2020 - Dec 2020

- Worked in the product team on the main platform using **AngularJS**, **Django**, and **MongoDB**.
- Lead the design and development of the 'Song Feedback' feature in collaboration with Product Owner and UX designer by actively participating in code architecture, UI design and workflow.
- The feature was a part of a holiday promotion campaign and led to a 30% increase in December Signups.
- Coded system test, unit test and integration test on various modules of the application
- Monitored performance of new features by collecting data such as page visits, point of action of users, and other Business Intelligence information using data funnels and **Mixpanel**.

Graduate Research Assistant, *Dept. of Computer Science, University of Victoria*, BC

Sep 2018 - Aug 2022

- Built the architecture and front-end of [Lodestone](#), a dashboard and data visualization tool for scientific data.
- Created **Data-flow Diagrams** and **UML** class diagrams to develop the architecture for expansion of the tool.
- Developed visualizations like Parallel Coordinates, Heat Maps, Bubble Charts with responsive design using **React**, **Redux**, **d3**, with **Typescript**.
- Mined contributor metadata from GitHub and Stack Overflow using **Java**, created schemas to store it into data lake and piped it into analytics tools like **Tableau** for visualization using python **pandas** and **SQL**.
- Published research on an exploratory study to analyze participation of students in communities like Stack Overflow, and Github to identify barriers to entry for new software developers(available on [Google Scholar](#)).

PROJECTS

React-app: Star Wars movie data from SWAPI (starwar-trish.herokuapp.com/)

- Designed and developed a responsive react app to read about various star war movies and it includes categorization of data based on Characters, Planets, Species, Starships and Vehicles.

Controlling PC using Hand Gestures , **Technical University of Sofia, Bulgaria (UG Fellowship)**

- Created a software that controls the mouse of a computer with Hand Gestures by performing tasks like moving the mouse, left click, right click, scroll, zoom in/out using computer vision with C++ and OpenCV .
- The software takes camera input and performs background subtraction, skin detection and finger tracking.

EDUCATION

MSc (Thesis) in Computer Science, *University of Victoria*, Victoria, BC

2018 - 2021

B.Tech in Information Technology, *Guru Gobind Singh Indraprastha University*, New Delhi, India

2014 - 2018