

Sohan Chowdhury

Kelowna, British Columbia, Canada | +1 250 899 7885 | sohanchy.cs@gmail.com
sohanchy.com | linkedin.com/in/sohanchy | github.com/sohanchy

SKILLS

Languages: JavaScript, Python, PHP, Typescript, Java, SQL
Backend: NodeJS, Express, Laravel, Flask, FastAPI, Redis, Postgres, RabbitMQ
Frontend: ReactJS, HTML, CSS (+ Sass), Material UI, Bootstrap
Miscellaneous: Docker, REST, Git, AWS, Agile, SCRUM, TDD

EXPERIENCE

Graduate Assistant - HCI LAB & CS Dept Sept. 2021 – Apr. 2023
The University of British Columbia

- Built the on-premise real-time device data collection system with integration for multiple device types, resulting in **3x faster prototyping** and significant **reductions in piloting costs** (NodeJS, Express, RabbitMQ).
- Developed the custom headless CMS (NodeJS, Express, Postgres) for the lab-group with pdf paper parsing and API integration, resulting in the **elimination of redundant data-entry tasks**.
- Taught labs in Web Programming (HTML, CSS, JS, PHP, MYSQL) and HCI (User-centered design).

Software Engineer Dec. 2019 – Aug. 2021
Digital Health Division, Grameen Telecom Trust

- Reduced customer waiting time** (10x faster) over the legacy system by developing a Pub-Sub reward points microservice aggregating user activities from 5 different applications (Python, FastApi, RabbitMQ, REST API).
- Led a team of juniors** from planning to finished product ensuring **successful on-time delivery** of 3 external b2b projects by (Laravel (PHP), Flask (Python), React (JS), PostgreSQL, Redis).
- Reduced human **labeling costs by 10%** by building a customized labeling dashboard (React, NodeJS, Express) and the data-pipeline (Python) for the ML receipt recognition system.
- Reduced release delays** by 2-3 weeks on numerous features by identifying key external blockers and resolving blockers early through proactive collaboration.
- Improved customer insights data by building a context-aware survey system (React, NodeJS, Express, PostgreSQL)

Associate Software Engineer Oct. 2018 – Nov. 2019
Digital Health Division, Grameen Telecom Trust

- Achieved 2-3x performance improvements on legacy REST APIs(PHP, Laravel, NodeJS, Express) by using caching, queuing, pub-sub, and SQL optimization on business-critical digital-health backends handling 5 million+ users.
- Took ownership, maintained and documented core monolith rest API with complex undocumented business logic.

Software Developer - Contract Dec. 2016 – Sep. 2018
Access to Information (a2i) Program

- Developed a geo-fencing based fraud prevention system reducing manual interventions by 70%.
- Created web replacements for paper processes resulting in significant boosts to organizational productivity.

EDUCATION

University of British Columbia Sep. 2021 – Apr. 2023
MSc in Computer Science — 4.33/4.33 — Fully Funded BC, Canada

American International University - Bangladesh Mar. 2015 – Sep. 2018
BSc in Computer Science & Software Engineering — 3.95/4.0 Dhaka, Bangladesh

PROJECTS

Lipi, Static Blog Generator GUI <https://github.com/SohanChy/Lipi> — **120+ Stars** Aug. 2017 - Jul. 2018

- Open source Java based GUI for WYSIWYG static blog generation based on emhugo.

Image Object Relationship Recognition

- Combined SOTA object segmentation and Bag-of-words model to perform near-real time detection of relationship between objects pairs in an image.