

Sohan Chowdhury

British Columbia, Canada | +1 250 899 7885
sohanchy.cs@gmail.com | [linkedin.com/in/sohanchy](https://www.linkedin.com/in/sohanchy) | github.com/sohanchy

EXPERIENCE

Graduate Teaching & Research Assistant

Sept. 2021 – Present

The University of British Columbia

- Designed & Developed VR hand-tracking applications resulting in 2 publications at top conferences.
- Taught labs in Web Programming (HTML,CSS,JS,PHP,MYSQL) and HCI (JAVA, Android).

Software Engineer

Dec. 2019 – Aug. 2021

Digital Health Division, Grameen Telecom Trust

- Achieved a 10x performance increase over the legacy system by developing a Pub-Sub reward points microservice aggregating user activities from 5 different applications (Python, FastApi, RabbitMQ).
- Led a team of 3 devs from planning to finished product to successfully deliver 3 new projects on-time.
- Built the fine-tuning data pipeline for the machine learning system reducing human labeling needs by 10%.
- Improved analytics data quality by developing a dynamic form builder (React, Express) for context-aware surveys.
- Reduced release delays by 2-3 weeks on numerous features by identifying key external blockers and resolving blockers early through proactive collaboration.

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 - Part Time

Dec. 2016 – Sep. 2018

Access To Information, Prime Ministers Office

- 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

SKILLS

Languages: JavaScript, Python, Typescript, PHP, Java, SQL

Backend: Express, Laravel, Flask, FastAPI, NodeJS, Redis, Postgres, RabbitMQ

Frontend: React JS, HTML, CSS (+ Sass), Material UI, Bootstrap

Miscellaneous: Docker, REST, Git, AWS, Agile, SCRUM, TDD

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.

Undergrad NLP & Vision Projects

- Object Relationship Recognition - Combined SOTA object segmentation and Bag-of-words model to detect relationship between objects in an image.
- Bangla Summarizer - Unicode implementation of TextRank and Lexrank in NLP in PHP with web-crawling.
- RiceDish Classifier - Created dataset and applied transfer learning for classification of rice dish images.

ACHIEVEMENTS & HOBBIES

- As team lead, won 2nd position in a national-level and 3rd position in a inter-University hackathon
- Multiple academic excellence awards including Summa Cum Laude, Vice-Chancellors & Dean's List Awards
- Hobbies include hiking, backpacking, camping, single-player video games, and landscape-photography