# Sohan Chowdhury

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

#### Experience

## Graduate Teaching & Research Assistant

Sept. 2021 – Present

The University of British Columbia

- Developed VR hand-tracking applications using ML libraries 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

BSc in Computer Science & Software Engineering — 3.95/4.0

Mar. 2015 – Sep. 2018 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.

## 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.

### SKILLS

Technical: Python, JavaScript, Java, PHP, SQL, Typescript, C#, Agile, SCRUM, TDD, Git, AWS

Backend: Express, Laravel, NodeJS, Flask, FastAPI, REST, Redis, Postgres, Docker, RabbitMQ, Kafka, Elasticsearch

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

### 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