

# NAYMUL HOSSAIN

naymul.com — n5hossai@edu.uwaterloo.ca — in/nay — github.com/n5hossai

## SUMMARY

---

- Experience with OOP, RESTful API, NLP, Database Management, TDD, Unit Testing, Ajax
- C++, C, Go, Java, Python, JavaScript, XML, AngularJS, Node.js, jQuery, Bash, Scheme, R, SQL

## EDUCATION

---

### University of Waterloo

Sept '17 – Apr '21

*Bachelor of Mathematics, Honours Computational Mathematics, Minor in Computing and Statistics*

## EXPERIENCE

---

### University of Waterloo

Waterloo, ON

*Department of Athletics & Recreation, Athlete Tutor*

Sept '19 – Present

- Tutor for Computer Science, Statistics and Mathematics for the university athletes

### bKash Limited

Dhaka, Bangladesh

*Software Development Intern*

May – Aug '19

- Integrated a conversational agent in Facebook, automating customer service with **Dialogflow**
- Implemented bKash USSD **API** for transactions in Messenger with **Java** and performed *TDD*
- Developed *SPA* for Messenger's WebView with **React**, and its *DOM* with **AngularJS**

### icddr, b

Dhaka, Bangladesh

*Data Analyst*

June – Aug '18

- Built a model to recognize satellite images for land cover classification by utilizing **Python** & **R**
- Trained the model using **Microsoft Azure**, and analyzed sample data with **R**
- Facilitated by identifying different land covers of remote areas for the medical team of icddr, b

### Nerd Community

Dhaka, Bangladesh

*Web Development Intern*

May – Aug '17

- Developed webpages, created registration and recruiting forms using **Node.js**
- Implemented UI changes by converting static elements to responsive components using **jQuery**
- Integrated educational contents and preparatory materials using *WordPress* and *FileZilla*

## PROJECTS

---

- **Stratego** –
  - A multiplayer functionality of the game *Stratego* for upto 4 players with graphics
  - Implemented with **C++** *OOP* paradigm using the *decorator*, *observer* and *MVC* design patterns and *RAII* idiom. Integrated *X11 Forwarding* for graphics
- **ChurnSpot** –
  - Created a segmentation model to spot customers at risk of leaving the bank
  - Using a dataset of **10000** customers, an *ANN* is trained with **TensorFlow**
- **BullyNot** –
  - Designed a browser extension to web scrape for bullying statements with *Scrapy*
  - Utilized IBM Watson's **NLP** API to perform sentimental analysis with **Python**
- **VersionSway** –
  - Built a version-control system for tracking changes in source code using **C++**
  - The program is used to fetch or change versions of a file in *linear* time traversal

## AWARDS & EXTRACURRICULAR ACTIVITIES

---

★ University of Waterloo Bengali Student Association, President Jan – Apr '19

★ University of Waterloo President's Scholarship of Distinction (2017)