

# NAYMUL HOSSAIN

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## SKILLS

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- Tools Languages: R, Python, SQL, MongoDB, MATLAB, Git, Docker, C++, C, Java, JavaScript
- Coursework: Computational Statistics & Data Analysis, Applied Linear Models, Computational Inference, Sampling & Experimental Design, Data Types & Structures, Object-Oriented Software Development, Computational Linear Algebra, Databases

## EDUCATION

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### University of Waterloo

Sept '17 – Aug '21

**Major:** *Bachelor of Mathematics, Honours Computational Mathematics*

**Minors:** ★ *Statistics* ★ *Computer Science* ★ *Combinatorics & Optimization*

**Award:** *University of Waterloo President's Scholarship of Distinction*

## EXPERIENCE

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### icddr, b

*Software Engineering Intern (Data Analyst)*

June – Aug '18

- Built a classifier, using **Microsoft Azure's CNTK model**, by utilizing **Python** and **R**
- Facilitated medical team of icddr, b by identifying land covers of remote areas with the classifier

### bKash Limited

*Software Engineering Intern (Full Stack Developer)*

May – Aug '19

- Integrated a conversational agent in Facebook, automating customer service with **Dialogflow**
- Developed Messenger's WebView and its *DOM* with **React**, and designed it using **Bootstrap**
- Implemented bKash **USSD API** with messenger, and increased transaction efficiency by **15%**

### Nerd Community

*Software Engineering Intern (Full Stack Developer)*

May – Aug '17

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

### University of Waterloo

*Computer Science & Mathematics Tutor*

Sept – Dec '19

- Taught university athletes up to 3<sup>rd</sup> year level of Computer Science and Mathematics courses

## PROJECTS

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🔗 **Protein-Fold** · Built a model to determine protein structure using **K-fold Cross-Validation**  
· Delivered a **97%** accuracy, with **MSE** & **RMSE** supporting the findings

🔗 **Stratego** · Implemented a multiplayer functionality game engine with interactive graphics  
· Applied object oriented **C++** principles, systematized with design patterns

🔗 **VersionSway** · Built a version-controlling system using object oriented **C++** principles

- 🔗 **TCP-Socket** · Created a **TCP Socket** program, in a client-server environment for file transfers

## EXTRACURRICULAR ACTIVITIES

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

★ StarterHacks, Development Mentor Jan '20