NAYMUL HOSSAIN

n5hossai.github.io/portfolio — naymulhossain21@gmail.com — in/nay — github.com/n5hossai — (+1) 289 668 8130

SKILLS

- Tools & Languages: R, Python, SQL, MongoDB, MATLAB, Git, Docker, C++, C, Java, Jupyter
- Frameworks & Libraries: Numpy, Keras, Tensorflow, Matplotlib
- 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

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

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%**

University of Waterloo

Computer Science & Mathematics Tutor   Sept – Dec '19

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

PROJECTS

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

Digit Classifier ·Built a model to determine handwritten digits, implementing **Tensorflow**
·Three convolution and three connected layers were used to create the **DNN**
·The test loss was 0.0609, and validation accuracy was 0.9826 after 5 epochs

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 ACTIVITES

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

- ⋆ StarterHacks, Development Mentor   Jan '20