Mohammad Abdul Ahad Chowdhury

11/53 Constitution Road, Meadowbank, NSW 2114
Phone: +61482605155 • maacpiash@outlook.com
Skype: maacpiash • LinkedIn: maacpiash
www.maacpiash.com • GitHub: maacpiash

I am an international graduate student of Data Science at Macquarie University, with experience in web development and machine learning. I am looking for a part-time employment or an internship in IT industry.

Education

Master of Data Science
Macquarie University
New South Wales, Australia
February 2020 – December 2021 (Tentative)

Bachelor of Science in **Computer Science and Engineering**
North South University
Dhaka, Bangladesh
January 2014 – August 2018
Capstone project: Fruit Image Classification Using Convolutional Neural Networks

Technical Skills

- **Programming languages:**
  C#, JavaScript, TypeScript, Python, C, Java
- **Web Development:**
  - ASP.NET Core, Entity Framework Core, Razor, Blazor, xUnit, Moq
  - React.js, Angular, Express.js, Hapi.js
- **Desktop app development:**
  Windows Forms, WPF, Electron.js, JavaFX
- **Database management and query:**
  SQL Server, SQLite, MongoDB, RethinkDB
- **Tools and Platforms:**
  Docker, MongoDB Atlas, Heroku, Azure DevOps, basic CI/CD
- **Development methodology:**
  Agile methodology with scrum

Publication

- Selection of Most Suitable Secondary School Alternative by Multi-Criteria Fuzzy Analytic Hierarchy Process. (Springer/AISC, 2019)
  DOI: 10.1007/978-3-319-98678-4_29
  Slide presentation: youtu.be/lztxu5F9Sxg
- Fruit Image Classification by Convolutional Neural Networks. (IGI-Global/IJSI, 2019)
  DOI: 10.4018/IJSI.2019100103
- Fusion of BWM and AHP MCDM Methods to Choose the Most Suitable Secondary School for an Individual in the Context of Bangladesh. (VJCS/World Scientific, 2019)
  DOI: 10.1142/S2196888819500167

Open Source Contribution

- ★ sandoche/Darkmode.js: A package for adding a dark-mode-toggle to React.js pages.
- ★ howtocode-com-bd/git.howtocode.com.bd
  A tutorial on Git VCS in Bengali.
- ★ devsonket/devsonket.github.io
  Developer cheat-sheet in Bengali.

Work Experience

Junior Software Engineer at **Dynamic Solution Innovators Ltd.**
Dhaka, Bangladesh
01 February 2019 – 31 January 2020
An enterprise software company [Official Website]. Worked here on Node.js-based web applications.

- ❖ **Project**: **Olwel**, *01 August 2019 – 31 January 2020*
  [Client's website]
  Environment: JavaScript, Hapi.js, React.js, Electron.js, RethinkDB, Jest
  Contribution:
  - ✓ Implemented attendance recording system for doctors and call-center operators.
  - ✓ Added search-by-date and search-by-name for doctor visits (a.k.a. 'missions').
  - ✓ Implemented sending mission-specific notes to the doctor on the mission.
  - ✓ Made missions-list-view component load faster by 50% by optimizing API calls.
  - ✓ Wrote unit tests; added test coverage (Istanbul).
  - ✓ Wrote scripts for generating reports on missions, with customized anonymization of patient data, for a research on 2019 dengue outbreak in Dhaka.

- ❖ **Project**: **OpenCRVS**, *01 March 2019 – 31 July 2019*
  [Official website • GitHub: opencrvs/opencrvs-core]
  Environment: TypeScript, Hapi.js, React.js, GraphQL, MongoDB, Jest, Docker
  Contribution:
  - ✓ Implemented lock-screen PIN setting policy.
  - ✓ Implemented lock-screen timeout using browser's page visibility API.
  - ✓ Added conditional validation for co-dependent form-fields.
  - ✓ Added offline data storage for form drafts that uses browser's localStorage.
  - ✓ Wrote unit tests and integration tests; refactored code to increase test coverage.
  [View commits on GitHub]

Research Assistant at **North South University**, Dhaka, Bangladesh
01 November 2016 – 31 March 2018
Part-time employment under the Department of Environmental Science and Management [News article]
Project: "Satellite-based Navigation in Civil Aviation: Performance Evaluation in the Context of Bangladesh"
Contribution: Developed the desktop application (using Windows Forms) for NODES, an airline management software that uses linear optimization to maximize usage of resources

Personal Projects

- **Connery** – ML.NET, Tensorflow.NET, ASP.NET Core
  [Link (Heroku): Swagger for API] [GitHub: maacpiash/Connery]
  Fruit-image classifier that uses convolutional neural network (model was developed via transfer learning from Inception v3 model).

- **Kon School?** — ASP.NET Core, Razor, xUnit, MongoDB (Atlas), Docker
  [Live website: Azure • Heroku] [GitHub: maacpiash/KonSchool]
  [Docker Hub: maacpiash/KonSchool]
  Fuzzy-AHP-based recommendation system for secondary schools in Bangladesh.

- **Vardict** — Node.js, TypeScript [NPM: vardict] [GitHub: maacpiash/vardict]
  A basic Node.js package for parsing labeled CLI arguments.

- **MqFind** — Node.js, TypeScript, Hapi.js, React.js [GitHub: maacpiash/MqFind]
  A full-stack app that shows listings of accommodation near Macquarie University, by scraping data from the university's website. *WIP*.

- **Winston** — C, CMake [GitHub: maacpiash/Winston]
  A library of basic AI and Machine Learning algorithms, from scratch. *WIP*.

- **Bangla News Scraper** — JavaFX, JSoup, Maven [GitHub: maacpiash/BNS]
  A cross-platform desktop app that scrapes news articles from a news portal.