

# Atish Kumar Dipongkor Akumardi@gmu.edu

## Research Interests

I have more than seven years of experience in software development and research. Currently, looking for an internship opportunity in Software Engineering (SE) and Machine Learning (ML). My main research focus is to solve SE-related problems using ML.

## Education

2022 - Present Doctor of Philosophy (On going), George Mason University, USA.

Major: Computer Science

Current Project: A Bimodal Pre-Trained Model for Understanding Natural and Programming Languages using Co-Attention

2017 - 2018 Master of Science in Software Engineering (MSSE), University of Dhaka, Bangladesh. Major: Software Engineering

Thesis: Analysis and Improvement of Move Method Refactoring

2010 - 2013 **Bachelor of Science in Software Engineering (BSSE)**, *University of Dhaka*, Bangladesh. Major: Software Engineering

## Significant Courses Attended in MSSE and BSSE

- Software Analysis & Design
- Software Design Patterns
- Software Project Management
- Machine Learning
- Probability & Statistics for Engineer
- Data Structures & Algorithms
- Software Testing & Quality Assurance
- o Database Management System
- Object Oriented Programming
- Ordinary Differential Equations

# Teaching Experience (3+ Years)

2020 - Present Assistant Professor, Jashore University of Science and Technology (JUST), Bangladesh.

2018 - 2020 Lecturer, Jashore University of Science and Technology (JUST), Bangladesh.

#### Courses Conducted

- Object-Oriented Programming
- Structured Programming
- Database Management System
- Applied Statistics and Probability
- Web Development
- System Analysis and Design

# Industry Experience (5+ Years)

2017 - 2018 Senior Software Engineer, Brain Station 23 Ltd, Bangladesh.

2014 - 2016 Software Engineer, Brain Station 23 Ltd, Bangladesh.

2013 Intern, Junior Software Engineer (Part Time), Brain Station 23 Ltd, Bangladesh.

#### List of Projects in Industry

2018 JUST Online Admission, Bangladesh.

Technologies: ASP.NET core 3.0, Entity framework 6 core, JavaScript

Description: An online admission portal for a public university. Using this portal, students can apply to this university and perform necessary tasks

2018 **Techstep NTP**, *Norway*.

Technologies: ASP.NET core 2.0, Angular 4.x, Entity framework 6 core

Description: A web portal that allows any company to keep track of mobile expenses, with automatic deduction of private usage from salaries and mobile tax reporting to the authorities.

2017 TCS API, Norway.

Technologies: ASP.NET MVC 5, Entity framework, NServiceBus, Azure App Insight

Description: A fault tolerant API that is used by resellers to manage cloud services on behalf of customers. Resellers can order and/or purchase Office 365 subscriptions using this API.

2015, 2016 SharePoint Portal of Robi, Beximco & Berger, Bangladesh.

Technologies: SharePoint 2010 - 2016, C#, Power-Shell

Description: An internal portal that automates several business processes using SharePoint. My responsibility was to develop workflows, web-parts, site branding and timer-jobs.

2014 Citytouch & Incepta MSFA, Bangladesh.

Technologies: WPF, XAML, WCF, C#

Description: Citytouch is the internet banking application of City Bank, and MSFA is the Mobile Sales Force Automation of pharmaceuticals company named Incepta.

#### List of Publications

- 2021 Dipongkor, A.K., Islam, M.S., Kayesh, H., Hossain, M.S., Anwar, A., Rahman, K.A. and Razzak, I., 2021, July. DAAB: Deep Authorship Attribution in Bengali. In 2021 International Joint Conference on Neural Networks (IJCNN) (pp. 1-9). IEEE.
- 2021 **Dipongkor, A. K.**, Nashiry, M. A., Abdullah, K. A., & Ritu, R. S. (2021). A Study on Bengali Stemming and Parts-of-Speech Tagging. In Emerging Technologies in Data Mining and Information Security (pp. 35-44). Springer, Singapore.
- 2020 Dipongkor, A. K., Ahmed, I., Islam, R., Nahar, N., Satter, A., & Siddik, M. S. (2020). ABMMRS Eradicator: Improving Accuracy in Recommending Move Methods for Web-based MVC Projects and Libraries Using Method's External Dependencies. International Journal of Software Engineering and Knowledge Engineering (IJSEKE), 30(09), 1289-1307.
- 2020 Islam, R., Satter, A., **Dipongkor, A. K.**, Siddik, M. S., & Sakib, K. (2020). A Novel Approach for Converting N-Dimensional Dataset into Two Dimensions to Improve Accuracy in Software Defect Prediction. J. Softw., 15(6), 147-162.
- 2018 Dipongkor, A. K., Ahmed, I., & Nahar, N. (2018, June). Move Method Recommendation using Call Frequency of Methods and Attributes. In 2018 Joint 7th International Conference on Informatics, Electronics & Vision (ICIEV) and 2018 2nd International Conference on Imaging, Vision & Pattern Recognition (icIVPR) (pp. 76-81). IEEE.

#### Achievements and Awards

- 1 Microsoft Most Valuable Professional Award 2016 & 2017 in Office Development Category.
- 2 Champion in National Hackathon 2014 in Water Safety Category.
- 3 Champion in BASIS Code Warriors Challenge 2014.
- 4  $1^{st}$  Runner's up in Firefox App Challenge 2014 in Service Category.

- 5 Top Contributor in SharePoint StackExchange from Bangladesh.
- 6  $1^{st}$  Runner's up COVID19 Detection in Blood Exams using Deep Learning
- 7 Honorable Mention in AI for Bangla Competition

#### Online Contributions

StackOverflow I have been contributing to StackOverflow since my student life. On this site, my reputation is almost 9.5K and I earned 8 gold badges. Approximately 1.0M people viewed my posts. I mostly helped people by answering C# and Javascript related questions.

CodeProject I published several technical articles on this website. Most of these articles are related to Share-Point and AngularJs. The average rating of my articles is 4.55 out of 5. Link to my articles.

#### Skills

Advanced Microsoft SQL, ASP.NET Core, ASP.NET MVC, Entity Framework, C#, WPF, Microservice, NServiceBus, SharePoint 2010-2016, Git, JavaScript, Azure Cloud

Intermediate Python, C++, Angular 2.0, Latex, TensorFlow, Docker, Source Code Mining, Machine Learning, Deep Learning, Natural Language Processing

# Languages

- 1 English [Professional Efficiency]
- 2 Bengali [Native]

#### Online Identities

- LinkedIn
- StackOverflow

- o GitHub
- Google Scholar

#### References

- 1 Dr. Kevin Moran, Assistant Professor, George Mason University, United States of America, Email: kpmoran@gmu.edu
- 2 Dr. Md. Saiful Islam, Lecturer, Griffith University, Australia, Phone: +61755528834, Email: saiful.islam@griffith.edu.au