Fahmid Morshed Fahid

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EDUCATION

NORTH CAROLINA STATE UNIVERSITY
PHD IN COMPUTER SCIENCE
Expected 2024 | AI in Education

NORTH CAROLINA STATE UNIVERSITY
MSc IN COMPUTER SCIENCE
2018 - 2022 | CGPA (3.80/4)

SKILLS

PROGRAMMING
Over 100000 Lines of Code:
Python • Java • C++ • C# • PHP

Libraries and Frameworks:
Pytorch • Keras • Stable Baselines • OpenAI Gym • D3rlpy • Scikit-learn • Hugging Face • Weka • JQuery • JSP • JDBC • REST APIs • Pandas

Other Tools:
Git • SVN • Mercurial • MySQL • MongoDB • Unity • Shell • Openface

AREA OF EXPERTISE

Deep Reinforcement Learning

Natural Language Processing

Classical Machine Learning

Multimodal Learning

Deep Learning

Data Mining & Feature Engineering

EXTRA CURRICULAR

- Program committee member of International AIED Society since 2022.
- Peer-reviewed many renowned journals & conferences like JAIED, IJCAI, IJEDM, SIGCSE, UMAP, LAK, and AAAI.
- Regional Winner: Microsoft Imagine Cup 2016, Bangladesh.

WORK EXPERIENCE

META | PHD SOFTWARE ENGINEER (MACHINE LEARNING) INTERN
May 2022 – August 2022 | PYMK Team | Menlo Park, CA
- Optimized pending friend requests' bidding in news feed of Facebook by using **deep reinforcement learning** and **contextual bandits.**
- Online evaluation showed an increment of in **2% daily active user.**
- Collaborated with multiple teams to document bidding pipeline.
- PyTorch, Hack, PHP, Mercurial, Internal: Bento, DAI, FBL.

META | PHD SOFTWARE ENGINEER (MACHINE LEARNING) INTERN
May 2021 – August 2021 | FCWB Team | Remote
- Personalized public figure comment ranking in Facebook using **graph embedding** through **deep learning.**
- Launched the model in production resulting in a **4% ROC-AUC improvement.**
- PyTorch, SQL, Mercurial, Internal: DAI, Fluent2, Filament2, GRASP.

POWER COSTS | SOFTWARE ENGINEER INTERN
May 2019 – August 2019 | Product Engineering Team | Raleigh, NC
- Developed an internal tool for splitting legacy projects into multiple smaller **SVN repositories** that reduced **6% storage in AWS** .
- SVN, Python, Java, Powershell.

REVE SYSTEMS | SOFTWARE ENGINEER
February 2017 – July 2018 | Billing Team | Dhaka, Bangladesh
- **Full stack agile development** of multiple websites including one e-commerce website, one Government website, one internal CRM.
- Maintained servers, databases, and network bandwidths for many websites.
- SVN, REST, JS, Java, MySQL, Shell, JDBC, JSP.

RESEARCH EXPERIENCE

EDUCATIONAL AI | PHD | GRADUATE RESEARCH ASSISTANT
January 2020 – Present | IntelliMedia Lab
- Investigate **reinforcement learning, deep learning, machine learning & multimodal learning** techniques for devising pedagogical policies & analyzing student behaviors with simulated and real-world data.
- Collaborate with multiple teams across multiple institutes that require extensive oral and written communication & documentation.
- Develop AI-based learning environments as part of GRA using Unity game engine and multimodal frameworks like OpenFace.
- Published **1 book chapter & 8 conference papers** in renowned conferences like AIED, UMAP, and LAK. See Google Scholar for the full list.

SOFTWARE ENGINEERING | MSc | GRADUATE RESEARCH ASSISTANT
August 2018 – Dec 2019 | RAISE Lab
- Applied **machine learning & data-mining** techniques with human-in-the-loop framework to identify technical debts in source code & to optimize UI testing.
- Worked with **Lexis Nexis** to understand software engineering issues in real-world domains as part of GRA.
- Published **2 journal papers** (TSE & ESE) and **1 conference paper** (FSE). See Google Scholar for the full list.