SADIA TABASSUM

ABOUT ME

I am a PhD student in the department of Computer Science at University of Birmingham, UK. My research area is Machine Learning for Software Engineering. I also have industry work experience as a developer in a global digital agency.

EDUCATION

University of Birmingham, UK - PhD

2018 - 2021

During my PhD, I worked as part of the project - Stable Prediction of Defect-Inducing Software Changes (SPDISC) which aims at creating more stable models for predicting defect-inducing changes, through the development of a novel machine learning approach for automatically adapting to concept drift.

I have investigated online cross-project/transfer learning for just-in-time software defect prediction. My work in this area has been accepted in the prestigious ICSE 2020 conference.

University of Leicester, UK — MSc in Advanced Software Engineering

2015 - 2016

Dissertation: Touristic Route Planner

This project involved developing an intelligent tour planner application. For the project, it was required to solve an optimisation problem where a user wants to visit a number of tourist attractions within a limited time.

The aim of the application was to automatically find out the best possible travel route for the user. The process included designing a Genetic algorithm, implementing the algorithm using Java, developing a graphical user interface using Swing to enhance user experience, testing and evaluating the approach leading to the final application.

Modules:

Internet and Cloud Computing, Service Oriented Architecture, Advanced System Design, Software Quality Measurement, Semantic Web, Generative Development, System Re-engineering.

IIUC, Bangladesh - BSc in Computer Science and Engineering

2005 - 2009

Modules:

Computer Algorithms, Data Structure, Structured Programming in C, Object Oriented Programming Java, C++, Numerical Methods, Database, Artificial Intelligence, Pattern recognition and image processing.

EXPERIENCE

University of Birmingham, UK — Graduate Teaching Associate

2018 - PRESENT

 Modules where I was/am a teaching associate are: Machine Learning, Intelligent Data Analysis, Artificial Intelligence, Database.

Perform Group, UK — Junior Front-End Developer

2012 - 2014

- Developed website features and functionalities using html5, css3, javascript, jquery, xml and Java/freemarker for large data-driven websites according to clients requirements.
- Worked in a cross-functional team of backend developers, project manager and OA testers.
- Practice of Agile methodologies, participating in daily scrum meetings, planning sessions and retrospectives

SKILLS

- Ensemble Learning
- Python, Java
 Matlab
 SQL
 Jupyter Notebook
 Pandas, Numpy
 Weka, MOA
 Machine Learning
 Evolutionary Algorithms
 Optimization
 Statistical Test
 Software Engineering
 Agile Methodology
- Transfer Learning HTML, CSS, Javascript

PUBLICATION

TABASSUM, S.; MINKU, L.L.; FENG, D.; CABRAL, G.; SONG, L. . "An Investigation of Cross-Project Learning in Online Just-In-Time Software Defect Prediction", 2020 International Conference on Software Engineering (ICSE), 2020 (accepted). (Acceptance rate 20.9%).

AWARDS

PhD scholarship by University of Birmingham, UK MSc scholarship by University of Leicester, UK