

Moinul Hossain

Objective

Seeking a full-time position as a Software Engineer with a focus on web technologies.

Work Experiences

2013-present Research Assistant, University of Nevada, Reno.

Worked on integrating the Nevada Climate Change Portal (a data repository for scientific data) with DataONE (a well known data repository platform).

2011–2013 **Software Engineer**, *Vizrt*, Dhaka.

Worked on a Java based product named *Escenic Content Engine* which provides online publishing solutions for publishers like newspapers or television channels.

Projects:

- **Project RSI:** Worked as the team lead for developing the content management system of Swiss broadcast company RSI on top of Escenic Content Engine.
- **Escenic-Mailchimp Integration:** Created a reusable plug-in for integrating Mailchimp with Escenic as a third party plug-in.
- The Mirror: Worked as a developer for the English newspaper as part of their ongoing enhancement on Escenic.
- Viz24: Worked as a team member for continuously enhancing the demo project of Vizrt that includes all the latest features of Escenic Content Engine.

2010–2011 **Software Engineer**, *Prime Bank Ltd*, Dhaka.

Worked for this local bank in Dhaka, Bangladesh for 6 months and created a money exchange application which is used by their money exchange branches in UK and Singapore to send money to Bangladesh.

Skills

- Proficient in Java, c, c++, Python, PHP, JavaScript, HTML and CSS. Familiar with Matlab and Lua.
- Fluent in relational database design, SQL, and ORM frameworks. Familiar with NoSQI databases.
- o Experienced in software design and analysis, RESTful web services and design patterns.
- Proficient in MVC frameworks like Spring 3, Struts 2, Codelgniter, Flask and Express JS. Proficient with front end frameworks like JQuery and Backbone JS.
- Have experience with SCRUM.

Academic Projects

2014–present **Software Environment for Watershed Modelling**, *Master's Thesis*, This work involved creating a software environment to make it easy for the watershed scientists to conduct research.

- 2014 **Forecasting the Weather of Nevada using Deep Learning**, course: Advanced neural networks, Constructed a model for weather forecast using Stacked Denoising Auto-Encoders(SDAEs).
- 2014 **Estimation of Face Count in a Panned Video in Real-Time**, *course: Advanced Computer Vision*, Built a real time system for detecting and estimating the count of human faces in panned video.
- 2014 **Lyric Based Song Genre Classification**, *course: Data Science*, Built models for classifying songs using existing machine learning techniques for NLP and compared the results.
- 2010-2011 **A Genetic Approach on Constructing Neural Network**, *Bachelor's Thesis*, Developed a genetic algorithm based method to construct a neural network optimally that works best for a data set.

Education

December

2013-present M.Sc., Computer Science and Engineering, University of Nevada Reno (UNR). expected in Thesis: Integrated Software Environment for Watershed Modelling. (GPA: 3.87/4.00)

2006-2011 B.Sc., Computer Science and Engineering, Bangladesh University of Engineering & Technology, Bangladesh.

Thesis: A Genetic Approach with Guided Mutation for Constructing Neural Network. (GPA: 3.18/4.00)

Academic

Research Interests

Software Engineering, Machine learning, Natural Language Processing.

Publications

- 1 Moinul Hossain, Sergiu Dascalu, and Frederick C Harris. A software environment for watershed modeling. In International Conference on Software Engineering and Data Engineering (SEDE), 2015.
- 2 Moinul Hossain, Banafsheh Rekabdar, Sushil Louis, and Sergiu Dascalu. Forecasting the weather of nevada: A deep learning approach. In International Joint Conference on Neural Networks (IJCNN), 2015.