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 while working with RSI.
- **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 NoSQl databases.
- Experienced in software design and analysis, RESTful web services and design patterns.
- Proficient in MVC frameworks like Spring 3, Struts 2, CodeIgniter, Flask and Express JS. Proficient with front end frameworks like JQuery and Backbone JS.
- Proficient in MVC frameworks like Spring 3, Struts 2 and Flask.
- 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

2013–present expected in December	**M.Sc.**, *Computer Science and Engineering*, University of Nevada Reno (UNR). 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. 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.