



# 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.

I am working in the Software Engineering lab to help create software environment to assist watershed modellers.

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 and 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.

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## Education

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

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## 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.

### Honors and Activities

2013–present **Research Assistantship**, UNR, Sponsor: Nevada EPSCoR, funded by NSF.

2013–2014 **Teaching Assistantship**, UNR, Computer Science and Engineering Department, CS 135: Introduction to Programming.

2014 **International student scholarship**, UNR.