Puddles

puddles@gmail.com (541)-555-5555
Github: https://github.com/Puddles **LinkedIn:** www.linkedin.com/in/puddles

Education

Masters of Science in Computer Science, University of Oregon, OR, USA — CGPA 3.76 | June 2017
Bachelors of Science in Computer Science & Engineering, — CGPA 3.81 | March 2015

Relevant Coursework

Data Science I, Data Science II, Artificial Intelligence, Machine Learning, Data Mining, Database Processing, Computer & Network Security, Internet & Web Development, Software Engineering, Distributed Systems, Algorithms & Complexities

Skills

- Programming Languages: C++, C, Python, Java, JavaScript, HTML, PHP, AJAX, OCaml, Scala.
- Platform/OS: Windows, Linux.
- Databases: MySQL, Oracle, SQLite, Neo4j
- Revision Control: Git, Subversion
- Frameworks & Applications: Apache Spark, Django, Bootstrap, Jupyter Notebook, Pandas, Scikit-learn, Weka3.

Projects

- **Smart sensor simulation framework:** Designed and built a framework using **Python** which simulates a spark server and sensors using MQTT protocol and spark streaming. Sensors detect congestion on the server side to decide how much data to send. Built a user interface for the framework using **Django** which allows users to change congestion levels and observe changes in results in real time.
- **Custom Machine Learning model to predict House Prices:** Lead a team to build a custom machine learning model using **Scikit Learn, Pandas and Python.** Several feature extraction and correlation measures were employed. The model uses classifiers to leverage categorical features to bin data into similar bins, on which regressors were used to predict prices using numerical and ordinal features.
- **Deep learning model to predict hand written digits:** Built a deep learning model using **Keras and Theano**, which uses a convolutional neural network to predict hand written digits.
- **Benchmarking and investigation of Spark-enabled raspberry pi clusters:** Built a raspberry pi cluster and sound sensing environment using MQTT protocol and spark streaming. Developed python code to run map, reduce and filter functions on the data received from the sensors. Benchmarked performance on the use of number of clusters.
- **Content based analysis of Anonymous Social Network:** Developed a web crawler using **Python** to collect public posts. Developed an analysis framework using **C++** to investigate user behavior on anonymous social networks.
- **Website to support instructors & students:** Developed a website using **HTML, CSS, PHP and MySQL** which assists in maintaining transparency between students and teachers.
- **Sentiment Analysis of Twitter data:** Extracted subjective and objective clues and n-grams from dataset using **C++**. Trained several classifiers to classify sentiments of each tweet.
- **Modelling of social network relationships:** Used a graph database(**Neo4j**) to model and analyze relationships in a social network.

Work Experience

- **Graduate Teaching Fellow, University of Oregon** — September 2015 -June 2017
  Instructed lab classes of CIS 122: Intro to Programming using Python 3.
  Instructed lab classes of CIS 111: Web development using JavaScript, JQuery, HTML5 and CSS3
  Instructed lab classes of CIS 110: Web development using Html5, CSS3 and MySQL.
- **Lab Instructor, North South University, Dhaka, Bangladesh** — January 2015 –August 2015
  Taught C programming, planned course syllabus, designed exam/quiz papers, conducted and graded exams.
- **Researcher, Machine Learning Group, University of Oregon** — January,2017-June 2017
  Developed a novel method to classify spam on social network by using a combination of content based information and probabilistic first logic.
- **Researcher, Network Security & Privacy Group, University of Oregon** — January 2016, December 2016
  Researched different privacy attacks on social media and methods to detect and prevent against them.