Muhammad Owais Bawany

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Technical Skills

Programming/Scripting Languages: Java, Python, R, SQL, Prolog, LISP, HTML, CSS, JS, PHP, Objective C
Technologies/Environment: Shell Script (Bash), Git, PostgreSQL, Flask, Vi(m), UML, JSON, Bootstrap, UNIX/Linux, MAC OS, Windows

Work Experience

Software Developer Intern: **May 2017 – August 2017**
LiveApp-SiliconW Inc., Kitchener, Ontario

- Developed websites, android and iOS applications with a team following client specification and wireframe
- Liaised with clients on requirements, project status, design options, proposals and technical issues
- Improved usability and stability of the existing portal by correcting errors and upgraded interfaces
- Suggested improvements to the mobile application development process and other software development practices

Assistant Maintenance Engineer: **May 2015 – August 2015**
Linde Pakistan Ltd., Karachi, Pakistan

- Facilitated software engineers in devising and implementing new security policies to maintain confidentiality, integrity and availability of all records in the database
- Ensure IT security (Physical, logical, legal) aligns with Global IS strategy
- Migrated and trained 200 users from MS Exchange to Lotus Domino liaison with Global IS
- Evaluated functionalities of the information technology system according to business needs

Projects & Activities

Machine learning in Genomics Research - Ottawa General Hospital:

- Wrote a Python script to request files from the GDC server to perform different clustering and bi-clustering algorithms on the dataset
- Normalized and performed correlation analysis on the data and then used a logistic regression model, as a supervised learning algorithm, to discriminate between validated ceRNA pairs and to find the unknown pairs (Python Pandas, Numpy and MatplotLib)
- Generated heat maps to analyze gene expression data (Python Seaborn library)

Tweet Information Retrieval System (Lucene Java, Python): Github

- Implemented Preprocessing functions for tokenization and stop-word removal. Then used Porters algorithm for stemming.
- Built an inverted index for fast access with an entry for each word in the vocabulary using hash maps.

Ottawa Mayor's Cyber Challenge - CyberSci 2017 (2nd Prize): CyberSci

- Activities involved recon of a vulnerable computer network, break through the cyber defenses, take control of the systems, and devising security policies to defend against cyber-attacks

Resume Review Database System (Python & SQL): GitHub

- Created a database system to review students resume and companies using PostgreSQL
- Respected all required normal forms
- Used Python and the flask framework for the back-end

Education

Honours Bachelor of Science: Specialization in Computer Science (Management option)
University of Ottawa, Ottawa, Ontario   **September 2014 – April 2018**

Volunteer Experience

VP Information Technology - Model United Nations Association   **September 2016 – January 2017**
University of Ottawa, Ottawa, Ontario

- Elected to look after the clubs' website and android/iOS application. Adding new features and keeping information up-to date

VP Marketing – Ottawa Students' for Wishes (Make-A-Wish)   **September 2014 – April 2017**
University of Ottawa, Ottawa, Ontario

- Organized multiple events and fundraisers including bake sale and club night to raise funds for children with life threatening diseases