

# Abdalla Mohamed Ahmed

7201 38th Ave S  
Seattle, WA. 98118  
[abdalla4@u.washington.edu](mailto:abdalla4@u.washington.edu)  
(206) 536-8299

## Objective

A software engineer who has a passion for innovation, interested in cutting-edge technology, and excited about working in a high-impact domain.

## Education

*University of Washington*, Tacoma, WA 09/2014 – 06/2016

- **Bachelor of Science in Computer Science and Systems (Software Engineering)**
- **Mathematics Minor**  
GPA: 3.7 (Dean's List)

*Highline Community College*, Des Moines, WA 09/2012 – 06/2014

- **Associate of Science in Computer Science**  
GPA: 3.41

*Highline High School*, Burien, WA 09/2010 – 06/2014

- **High School Diploma (Honors)**  
GPA: 3.75

## Qualifications/Skills

- Proficiency in programming languages such as Java, C, C#, Python, HTML, JavaScript.
- Experience with developing, testing, and deploying services that implement a wide range of econometric and machine learning models.
- Familiarity with professional software engineering practices and best practices for the full software development life cycle, including coding standards, code reviews, source control management, build processes, testing, and operations
- Usage of SQL server to create a database system and SQL queries to search through a database.
- Connect database systems to a Java application (GUI).
- Usage of pseudocode to either create or describe a piece of code
- Database design experience (SQL) and experience with XML and DTD.
- Can use programming experience to find strategic solutions in solving abstract problems.
- Strong Computer Science fundamentals in object-oriented design, data structures, algorithm design, problem solving and complexity analysis
- Strong analytical skills and excellent problem solving abilities
- Professional software development experience
- Experience using agile development methodologies
- Experience in software development and proficiency in Java EE, Spring framework and in designing, developing, testing, implementing and supporting web services, API's, data structures, object-oriented design

## **Projects/Relevant Experience**

**Math/Computer Science Teacher, Hope Academy** 02/2018 – present

- Teach K-8 math.
- Teach computer science to 4-8 graders.

**Interface Support Engineer, Medstreaming** 04/2017 – 11/2017

- Troubleshoot medical systems that use PACS (Picture Archiving and Communication Systems).
- Troubleshoot medical systems that use the HL7 (Health level 7) protocol.
- Troubleshoot medical systems that use DICOMs (Digital Imaging and Communication in Medicine).
- Search through logs for system errors.
- Work with development teams in debugging system errors and in customizing.
- Configure medical systems to do certain jobs.
- Meet with clients to either develop their new medical environment or assist them in troubleshooting their medical systems.
- Work with databases, logs, and network applications while investigating an issue in a medical system.
- Configure the connection between PACS (Picture Archiving and Communication Systems) systems and EMR (Electronic Medical Record) systems.
- Configure what is sent from PACS systems to EMR systems.
- Forward, archive, and retrieve medical studies from one system to another.

**Group Projects, University of Washington, Tacoma (Institute of Technology)** 10/2015 – 06/2016

- The Natural Language Processing project was based on creating a trajectory database that stores all verses and characters of the holy Quran. The database was created for the purpose of designing and implementing a user interface. This required good communication between team members to ensure all work was accomplished within the specification. My role was to design and implement the user interface using Java and SQL.
- Created a maze game on the web. My role was to design a 3D shape using JavaScript, search for a technique to generate the maze instead of hardcoding it, and work on the algorithm for the collision detection. <http://tcss491-group-project.github.io/mark/index.html>.
- Produced a language library that is modest, comprehensible, and more attainable to work with. My role was to create and perform actions on the GUI buttons using Java.

**Individual Projects, University of Washington, Tacoma (Institute of Technology)** 04/2015 – 06/2016

- Programmed a brute force algorithm, a divide and conquer algorithm, and a dynamic programming algorithm for a real world problem.
- Implemented the Huffman algorithm on a text file.
- Implemented the deep first search algorithm on a real world problem.
- Balanced a BST tree to make it an AVL tree.
- Debugged two bytecode files through the use of JUnit testing
- Wrote a matrix calculator using an instruction language (x86).

**Tutor, King County Library System** 09/2012 – 06/2014

- Provided private instruction to individual and small groups of students to improve academic performance, improve occupational skills, or prepare for academic or occupational tests; taught students study skills, note-taking skills, and test-taking strategies; assessed students' progress

throughout tutoring sessions; prepared lesson plans or learning modules for tutoring sessions according to students' needs and goals

- Provided networking and desktop support, account maintenance and printing assistance to the library staff. Troubleshoot and resolve complex technology issues.

## **References**

Mohamed Ali  
Computer Science Professor; Graduate Faculty  
University of Washington  
Tacoma, WA 98402  
Office: CP 230  
(253)-692-5860  
[mhali@uw.edu](mailto:mhali@uw.edu)

Turan Kayaoglu  
Social Studies Professor; Graduate Faculty  
University of Washington  
Tacoma, WA 98402  
Office: WCG 410  
(253)-692-5856  
[turan@uw.edu](mailto:turan@uw.edu)

Ruth Vanderpool  
Mathematics Professor; Graduate Faculty  
University of Washington  
Tacoma, WA 98402  
Office: GWP 430  
(253)-692-4310  
[rvanderp@uw.edu](mailto:rvanderp@uw.edu)

Craig McBride  
Mathematics Professor; Graduate Faculty  
University of Washington  
Tacoma, WA 98402  
Office: WCG 223A  
(253)-692-5699  
[mcbridec@uw.edu](mailto:mcbridec@uw.edu)