

Muhammad Usman Majeed (<https://musmanm.github.io/>)

Email: 12mm123@queensu.ca

Cell: (613)-770-6975 Address: 43 Elm Street, Kingston, ON

SUMMARY AND ACHIEVEMENTS

- Years of professional experience working as a software developer with experience creating production level applications
- Developed centralized web portal for device checkout and remote access system at AMD, which improved overall efficiency
- Led the kernel mode driver team in the successful bring up of windows display driver 2.0 on windows 10 specifically on the new memory residency model and graphics virtual memory
- Led backend development at Queen's in the area of machine learning, data training and mining.
- Professional experience performing as a data analyst to interpret and analyze data using statistical techniques
- Conducted research studies in area of cognitive sciences, where I developed eye tracking system to assist fellow researchers
- Professional experience in the area of computer vision and focus on machine learning for 4th year capstone project

EDUCATION

Computer-Software Engineering (4th year) with Professional Experience

[Sep 2013 – June 2018]

Queen's University, Kingston, ON

Awards: Queen's University entrance scholarship for excellent academic performance

Top 10 interns of the year award at AMD

NSERC Undergraduate Student Research Awards

PROFESSIONAL EXPERIENCE

Data Analyst (Queen's TEAM) at Brookfield Renewable

[Sep 2017 – Apr 2018]

Data mining and statistics

- Developing and implementing data analyses, data collection systems and other strategies that optimize statistical efficiency and quality
- **Skills picked up:** Data Analysis, Data Mining, Regression, Python scripting, Automation

Software System Engineer at AMD (Advance Micro Devices)

[May 2016 – Aug 2017]

Top 10 interns of the year award at AMD

- Collaborated closely with various engineering teams to implement features and debug issues within the GPU-specific driver
- Transformed hardware specifications into tools that analyze APU state to root cause hard to diagnose hangs
- Supported software Engineers company wide and help put their experience in problem analysis into automated tools
- Used and enhanced the knowledge of Windows and Linux internals to create industry leading tools capable of correlating operating system status with hardware status
- **Skills picked up:** C/C++, Unit testing, Python, Ruby, PHP, Machine Learning, Mobile development, PostgreSQL, Perforce

Software Developer at Tech Connex

[May 2016 – Aug 2016]

Lead SCRUM master

- Worked within the research and development engineering team to develop a mobile and web based solution for organizations in the tech industry in Ontario
- Provided engineering support by the developing algorithms for Android and iOS applications to incorporate service oriented back end sources
- Reviewed and debugged previous coding scripts for website to analyze and solve issues to increase performance. This resulted in lower latency between server and the front end of the website
- Conducted beta-testing using client feedback and surveys to improve the overall interface of the product
- **Skills picked up:** Team Management, Full Stack web development

Project Manager at Queen's University

[Sep 2015 – Apr 2016]

APSC 100 – software project manager - Sponsored by KRONOS

- Managed first year students in developing an iOS application (in Objective-C) for course scheduling and organization
- Provided feedback on projects to Faculty Advisors, Course Coordinator, and Program Associate
- Ensured the teams remain focused on their projects and on-schedule for timely completion
- Provided results and application overview to client company KRONOS for further implementation as management solution
- **Skills picked up:** Team Management, Rapid Prototyping, Android / iOS Development

TECHNICAL SKILLS

Programing/Software Application:

- Programing languages: C, C++, VHDL, Arduino, Node js, Angular js, Java, Html, Python, C#, R
- Knowledge of Computer Networks, Databases, Data Structure, Machine Learning Models and their implications.
- Rapid prototyping on Android and iOS platforms
- Experience with following software packages xCode, MATLAB, AutoCAD, Adobe Creative Suite, Operating systems, Google play services, Android Studio and Unity 3D

PROJECT EXPERINCE – Most of my side projects are available on GitHub: <https://github.com/musmanm>

4th Year Capstone Project – Face Recognition and Home Security using Machine Learning [Sep 2017 – Apr 2018]

- The project utilizes Google's Tensor Flow machine learning library as this has the biggest developer support
- We have implemented several different learning models from Regression to Deep Learning, these models are still learning from the data we are providing on daily bases. After Cross validation, we are at 76.6% Accuracy but our goal is to reach 82.3% for our use case

Apple AR kit Project – World of Virtual Objects [May 2017 – Aug 2017]

<https://github.com/musmanm/PlacingObjects>

- Augmented reality offers new ways for users to interact with real and virtual 3D content in your app. This project offer learner with examples that they can implement in their projects or learn from it

Google Daydream VR Game – Space Clash [Sep 2016 – Apr 2017]

Available at Google Play Store

- Used Unity 3D to Create a Virtual reality game that completely immerse you in an experience where you are a defender of earth
- Implemented Google DayDream SDK in Unity 3D using C# language

Computer Vision – Edge Detection Open Source Library [May 2016 – Aug 2016]

Coming soon on Google Play Store

- Developed an open source library to help new learners in the field of computer vision, which is easy to implement and well documented
- Application takes a photo of what's in view of the camera and uses a Laplacian 3x3 matrix as the Kernel for a convolution filter to create a bitmap of the captured image where the edges of the image are detected and shown

Full Stack Website – Volunteer Project at Internship [May 2016 – Aug 2016]

<http://www.techconnex.ca/>

- Updated the back end of the website to make it more efficient in communicating to the front end and back
- Updated the front-end feature according to the given specifications by my Manager, this resulted it high website traffic as it was more inviting

Apple iOS Project – Qtap [May 2014 – Aug 2014]

[Application](#)

- Created an iOS application for 1st year students at Queen's University to help organize and get familiar with the University.

EXTRACURRICULLAR EXPERINCE

Member: Queen's Engineering Society, IEEE, Apple Developers, XDA Developers and Qhacks- Queen's Hackathon.

Volunteer Experience: Queen's Pakistani Student Society for Charity Work, Red Cross Canada and Extreme Start-ups

Sports and Hobbies: Soccer, weightlifting and PC gaming/game development (RPGs and FPS games)

Certification

- Coursera Certifications in: Machine Learning, Full Stack Development, Data Structures and Game Development