

# MOHAMMAD DARAGHMEH

## Employment

### Microsoft

Technical Program Manager II

Redmond, WA

Apr. 2020 - Current

My work consists of leading major and minor features on both big data storage & computation with world-class data scientists, engineers, and other fellow PMs in unison to build out solutions with customer satisfaction, reliability, and scalability being key success metrics.

**Core Responsibilities:** Architecting, Cross-team Communicating, Designing, Documenting, Envisioning, Identifying risk & OKRs, Presenting, and Stipulating the *unknown*.

- Led multiple (4+) successful releases for big data engine **Cosmos** & its proprietary language **SCOPE** with features that brought tremendous value and enhancements to our production loads both in reduced process time & smarter compressed data formats with new support for *JSON, SQL Tables, Meta Data Services, .NET Standard/Core, & Python*.
- Drove the implementation of Tesseract, a machine learning reporting system, that predicts & alerts for future big data storage & processing power shortages years in advance. This initiative I led has saved the company \$20 million in SSD costs and prevented at least 2 mass CPU failures.
- Shipped minor features for direct engine improvements within the SCOPE language – *Windowing function/Annotations* (GDPR Support)/*Parquet & ORC Support/Cube & Roll*.

### Microsoft

Technical Program Manager I

Redmond, WA

Feb. 2018 - Apr. 2020

My journey at Microsoft started when I was first sought out for a role on the R&D internal engine system codenamed "Cosmos." A system on the scale of exabytes with tens of thousands of daily queries/calculations.

- Drove big data storage improvements on performance & efficiency for a companywide savings of over \$50 million dollars in the first year of deployment.
- Refreshed over a decade of documentation and training courses resulting in the first-ever centralized knowledge bank for Cosmos and its language SCOPE that boasts a user base of 50K+.
- Researched and led the creation of a streamlined Executive PowerBi dashboard for all relevant big data storage/computation metrics which was presented to multiple executive board panels. This deep insight steered our global rollout of GDPR compliance data centers in Europe/Asia.

### Intuit

Technical Product Manager Intern

San Diego, CA

May 2017 - Aug. 2017

- Led cross-functional R&D teams consisting of engineers, designers, and legal contacts toward new projects focused on M.L initiatives through iterative prototyping, customer interviews, and A/B testing.
- Identified deep customer needs through data analysis, customer insights & empathy for improved product flows.
- Granted a US patent (10956925B1) for the technical design of an ML system that would calculate and predict the best payment method for any type of purchase with habits, location, and other metrics feeding into a neural network.

### Rochester Institute of Technology

Web Developer/Master/Social Media Analyst

Rochester, NY

Aug. 2014 - June 2017

- Sole developer of front-end/back-end implementation for both RIT's Simone Center and F&A site.
- Built an engaged online community with unique content from scratch to over 5000+ fans.
- Managed & maintained various online platforms for functionality, security, and uptime.

### Daraghme Digital

Freelance Web Developer

Global

2010 - Current

What I have are a particular set of skills. Skills I have acquired over a long career. Skills that make me a dream for clients as big as universities to small law firms on the east coast.

- Specializing in rapid deployment of WordPress-based websites with layers of SEO/SEM & analytics.
- Services ranging from Design/Creation, Custom UI, Hosting, Maintenance of content/database/design, Marketing, to repeat data protection/migration.

## Projects

### Microsoft Hackathon 2021 (Global Event)

For this project "Natural Language Processing + SCOPE", our hack was to use NLP to help Microsoft employees at large perform data analytic queries in real-time without the need to write any explicit code. This was in conjunction with Microsoft and OpenAI's shared plans to bring GPT-3 based programming in the near future powered by the neural network architecture known as Transformer. In short, our awarded hack served to generate functioning scripts for analytical insight in the quickest and simplest way with your own words whether you are a novice or an expert coder.

### Microsoft Hackathon 2019 (Global Event) - Top 5

Project MOVEMENT won my team and me the honor of being selected by Satya Nadella and the board as the top five most innovative hacks of the year among 1000+ projects with a private grant for a full prototype. MOVEMENT was created with the goal of providing an affordable and personalized way for just about anyone to improve their day-to-day or even professional motions/form for a wide range of activities. Activities such as physical therapy, CPR certification, archery, dance, weightlifting, and proper posture. The core technology that I was involved in and presented to leadership were:

- The trained M.L model would ingest and process garden-variety videos such as cell phone footage to determine limb positions, range of motion (ROM), and more.
- The underlying system (Azure Cloud Service) takes the processed video & performs frame-by-frame comparisons of the expert's and novice's body position & motion.
- The Suggestion Engine would then communicate opportunities for improvement or correction through visual cues, text-to-speech, or a combination to the novice in real-time.

## Contact

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🏠 Daraghmeh

## Education

2017 **Rochester Institute of Technology (RIT)**  
Bachelor of Science  
Computer Engineering  
GPA: 3.85

2012 **Academies @ Englewood**  
Highschool (pre-engineering)

## Activities

### Participated Hackathons

RocHack 14, BrickHack 15/16/17, HackNJIT 15, HackRPI 15, Microsoft Hackathon 19/20/21

### Muslim Student Association

Vice-President/Director of IT for the largest student body organization at RIT from 2013-2017

### TigerTank 2015 (Global Event)

Top 5 finalists out of 200+ teams for a competition similar to Shark Tank but with an RIT twist. My winning entry FlickShare aimed at bringing back that feeling of togetherness when watching media online.

### BrickHack 2015

Winner of Bose SoundTouch API challenge with my entry of MusicShare that allowed anyone via SMS to search/play/skip and control their Bose speaker.

## Volunteering

### Washington Trail Association - Volunteer

Feb. 2019 - Current

Building & maintaining hiking trails with similar folks and planting new tree nurseries

### MAPS - Teacher/Mentor

Summer 2019 - Summer 2021

Lead multiple classes with students ranging from 7-14 years old on Robotics, SAT Math, and 3D printing

### Barakah Charity - Event Coordinator/Web Master

Jan. 2013 - Aug. 2016

Founding member of a non-profit with the goal of helping those with less via food drives & housing support

## Skills

### LANGUAGES

C/Objective C  
CSS  
Java  
HCS12  
Assembly  
.NET  
VHDL/Verilog  
Python  
SCOPE  
SQL

### HARDWARE

Altera Board  
HCS12  
Digital  
Multimeter  
Function  
Generator  
Microsoft  
Kinect  
Microsoft  
Surface  
Tektronix  
Oscilloscope

### SOFTWARE

Azure Dev Ops  
Android  
Autodesk  
Inventor/Revit  
MicroStation  
Eclipse/PyCharm  
Visual Studio  
Matlab  
PSPice  
Quartus