

Fatima Qarni

Software Engineer @ Microsoft

Director of Tech Operations @ Muslim Women in Technology (MWT)

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📍 qarni

Skills

Languages:

- › *Proficient:* Java
- › *Intermediate:* C++, C, Python
- › *Familiar:* SQL, JavaScript, HTML/CSS, Go, MATLAB

Tools & Frameworks:

CUDA, JUnit, Git

Leadership & Involvement

- › **Muslim Women in Technology (MWT) Director of Tech Operations: 2020 – Present**
 - Plan social, networking, educational, and mentorship events and programs with other exec board members.
 - Manage website and accounts to ensure a great MWT member experience.
- › **UIC Honors College Ambassador: 2016 – 2018**
 - Mentored engineering students and planned events.
- › **UIC CS Teaching Assistant: Fall 2016 – Spring 2017**
 - Held office hours and facilitated weekly lab sessions.

Education

Northwestern University

M.S. Computer Science - 2020

University of Illinois at Chicago

B.S. Computer Science - 2019

Relevant Coursework

- › Distributed Systems
- › Parallel Computing
- › Operating Systems
- › Parallel Processors
- › Scalable Software Architecture

Work Experience

Microsoft | Redmond, WA

Software Engineer: Visual C++ IDE Experience *Feb 2021 - Present*

- › Working on improving the Visual Studio C++ Intellisense experience.

Software Engineer Intern: Visual C++ *Summer 2020*

- › Worked on modernizing the abstract semantic tree APIs for MSVC and other compilers.
- › Worked on an IPR based pattern matching interface that can be used universally across different compilers.
- › Developed warning checkers and the pattern matchers they needed.

Software Engineer Intern: Azure SDK – Java *Summer 2019*

- › Developed an extension for the Microsoft Authentication Java library to allow for single sign on scenarios for the Azure SDK.
- › Created a persistent token cache, allowing for secure storage with encryption using OS specific Data Protection APIs.
- › Allowed for use across different languages and Microsoft products by ensuring the cache is thread/process safe.

Braintree (a PayPal company) | Chicago, IL

Software Engineer Intern: Gateway Sustainability – Ruby *Summer 2018*

- › Refactored SQL queries to be more efficient and used Rails to allow old data from unused accounts to be redacted.
- › Updated Capistrano tasks for deployment of code across servers.

Projects

Raft – Go *June 2020*

- › Distributed key-value database which implements Raft, a consensus algorithm for managing a replicated log across nodes.

Canny Edge Detection with CUDA – C *Winter 2020*

- › Detects edges for images using the Canny algorithm.
- › Parallelizes computationally intensive parts of image processing with CUDA (parallel computing platform/API).
- › Utilizes shared memory to optimize code and shorten processing time.

Google Pensieve – Python *Fall 2018 – Spring 2019*

- › Analyzes a user's Google data using image recognition and file data.
- › Flags risky documents on a Google user's account to help user see what they have at risk in case of an account breach and understand how to be safer with data storage.

Midpoint – Android App – Java *Spring 2017*

- › Allows two users to find a meeting place between them, given inputs of their locations and distance willing to travel.