Timur Javid

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EDUCATION

University of Illinois at Urbana-Champaign (UIUC) Expected Graduation: May 2022
Master of Computer Science (5-year BS/MCS) GPA: 3.90
Bachelor of Science in Computer Science

Parkland College December 2018
Associate of Engineering Science Graduated with Honors

Illinois Mathematics and Science Academy June 2017
High School Diploma

ENGINEERING SKILLS

(By proficiency level)

●●●●	Java	●●●●	Python	●●●●	C	●●●○	Golang	●●●○	C++	●●●○	JavaScript
●●●○	HTML5/CSS3	●●●○	MySQL	●●○○	C#	●●○○	Haskell	●●○○	Rust	●●○○	MongoDB
●●●●	Software Dev	●●●●	React/Redux	●●●●	NumPy	●●●●	SciPy	●●●●	Git	●●●○	LaTeX
●●○○	Django	●●○○	Arduino	●○○○	FPGA						

RELEVANT COURSEWORK

- Applied Cryptography
- Applied Machine Learning
- Artificial Intelligence
- Autonomous Vehicle System Eng.
- Computer Architecture
- Database Systems
- Data Structures
- Differential Equations
- Distributed Systems
- Numerical Methods
- Algorithms & Models of Comp
- Programming Studio
- Probability and Statistics
- Quantum Info Processing Theory
- System Programming
- Scientific Visualization

PRESENTATIONS, PROCEEDINGS, AND PAPERS

- Jawad, Mona, Javid, Timur, Lualdi, Colin P., & Angrave, Lawrence (2021, April). *ScribeAR: Design and Use of Augmented-Reality Captioning for Inclusive Education Access.* Paper presented at the American Society for Engineering Education Illinois-Indiana Section Conference Proceedings.

ACADEMIC EXPERIENCE

Graduate Research Assistant May 2021 – Present
Kwiat Quantum Information Group
Under Paul Kwiat, Department of Physics @ UIUC

- Developing a drone-to-drone based quantum communication channel for quantum key distribution (QKD) utilizing a variation of BB84 decoy-state protocol.
- Adapting LDPC codes for QKD error correction and implementing privacy amplification for free-space QKD data using numerical key-rate analysis.
- Improving drone-to-drone locking performance through embedded systems development, such as integrating a high-performance ADC to interface with a RaspberryPi gimbal controller (C++).

Student Researcher September 2019 - Present
ScribeAR (Augmented Reality Research)
Under Lawrence Angrave, Department of Computer Science @ UIUC

- Maintaining a codebase for an augmented reality (AR) compatible web application providing live captioning services, utilizing Web Speech API and integrating Microsoft Azure captioning in a React/Redux front end.
- Prototyping hardware using Arduino for sound localization to provide users with directionality in a heads-up display.
- Formulating an experiment to gather feedback on effectiveness of AR-based captioning in a academic settings.

Course Assistant January 2018 - May 2018

CS 125 – Intro to Computer Science (UIUC)

- Collaborated with teaching assistants in labs to teach students about the basics of Java programming and guided them through lab projects.
- Tutored students one-on-one during office hours to cement understanding of course concepts and mentored them through software development.

PROFESSIONAL EXPERIENCE

Software Development Engineer Intern May 2020 – August 2020

Amazon Web Services (AWS)

- Spearheaded and developed a front-end user interface for an existing command line tool using React/Redux and a Golang backend within two months.
- Led design meetings for the project, gathering and integrating feedback from code reviews and weekly meetings.

EXTRACURRICULARS

Director August 2019 – May 2021

Midwestern Robotics Design Competition (MRDC)

- Built and maintained the organizational website to provide teams and sponsors with easy access to information.
- Established relationships with other corporations for fundraising and sponsorships.
- Organized outreach events, presenting at a local children's science museum to get children interested in robotics.
- Initiated media coverage of the competition to increase promotion and awareness.

President December 2017 - December 2018

Parkland Science Club (PSC)

- Managed other executive members and their planned science activities for Parkland students.
- Coordinated with professionals in science fields to offer opportunities to speak and share their work with Parkland students.

MISCELLANEA

Hobbies

- Hiking & Backpacking: Backpacking and hiking is a great way to unwind and disconnect. I frequently look for new hiking trails locally and drive out to new places.
- Photography: you can check out some of my photos on my website! Taking photos in nature helps me appreciate my surroundings.
- Cooking: I see cooking as a way to connect with other people and cultures. I like to experiment with different cuisines and cooking styles. One of my favorite foods to make (and eat) is Neapolitan style pizza.