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

●●●●	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 an academic setting.

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 such as 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.