Timur Javid

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EDUCATION

University of Illinois at Urbana-Champaign (UIUC)

Master of Computer Science (5 year BS/MCS)

Bachelor of Science in Computer Science

Parkland College December 2018

Associate of Engineering Science Graduated with Honors

Illinois Mathematics and Science Academy

June 2017

GPA: 3.90

Expected Graduation: May 2022

High School Diploma

ENGINEERING SKILLS

••••	Java	••••	Python	••••	С	•••0	Golang	•••0	C++	•••0	JavaScript
•••0	HTML5/CSS3	•••0	MySQL	••00	C#	••00	Haskell	••00	Rust	••00	MongoDB
••••	Software Dev	••••	React/Redux	••••	NumPy	••••	SciPy	••••	Git	•••0	LaTeX
••00	Django	••00	Arduino	•000	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 headsup 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 prototyped a front-end user interface for an existing command line tool using React/Redux and a Golang backend.
- 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.
- Initiated media coverage of the competition to increase promotion and awareness.

President
Parkland Science Club (PSC)

December 2017 - December 2018

- 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.