

# 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

Expected Graduation: May 2022

GPA: 3.90

### Parkland College

Associate of Engineering Science

December 2018

Graduated with Honors

### Illinois Mathematics and Science Academy

High School Diploma

June 2017

## 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 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**

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. One of my favorite foods to make is Neapolitan style pizza.