

# Abir Islam

267-705-0342 | North Wales, PA | [abirforhire@gmail.com](mailto:abirforhire@gmail.com) | <https://youtube.com/@GlitchGobbler> | [github.com/abirislam](https://github.com/abirislam)

## EDUCATION

### Drexel University

*Master of Science in Computer Science*

Philadelphia, PA

*Expected May 2026*

### Temple University

*Bachelor of Science in Computer Science with Honors*

Philadelphia, PA

*December 2023*

## EXPERIENCE

### Comcast

*Software Engineer Intern*

May 2023 – Aug. 2023

*Philadelphia, PA*

- Developed frontend features such as option cogs and submit buttons that called backend APIs for the ActiveCore DCP web application used by Comcast Business teams to manage their SD-WAN customers
- Contributed test cases for UI elements that made sure API calls were being forwarded properly, as well as supporting documentation to enable easier comprehension across both engineers and project leads
- Enhanced the web application documentation page with in depth instructions regarding the packages used to more easily onboard new developers into their role
- Participated in daily scrum meetings with an offshore team to assist in resolving any blockers as well as update progress on current user stories

### Temple University

*Undergraduate Research Assistant*

May 2021 – Aug. 2021

*Philadelphia, PA*

- Collected and sanitized over 4,000 webpages using webscraping methods into CSV's for team members
- Onboarded new colleagues in setting up their own Google Colab (Jupyter notebook) for webscraping

## PROJECTS

### OCR Overlay Assistant for Game UI Parsing | *Electron, Node.js, JavaScript, Python, Tesseract*

April 2025

- Developed a desktop overlay application using Electron and Python to automate in-game item recognition
- Enhanced OCR accuracy using Tesseract, image processing, and 8,000+ scraped entries from a game database
- Packaged and deployed the app via Electron-Forge, handled inter-process communication between Electron and Python, and optimized performance for instant response without redundant resource loading
- Produced a project demo showcasing the overlay: [https://youtu.be/tqMijU\\_\\_ZPI?si=bz75WX5TOmvenr-N](https://youtu.be/tqMijU__ZPI?si=bz75WX5TOmvenr-N)

### Image Rectification Application | *Matlab*

December 2024

- Developed an application to detect and correct the perspective of a document captured on a flat surface
- Implemented edge detection, hough transforms, non-max suppression, and k-means clustering to accurately identify and map document corner points to a top down point of view

### DIY NAS Server | *Linux, Docker, Networking, YAML*

October 2024

- Deployed a personal NAS server using Ubuntu Server that integrates media streaming and cloud storage
- Configured advanced networking options, including port forwarding, VPN secure remote access with Wireguard, DNS settings, and local reverse proxying with Nginx for streamlined access to services
- Employed Docker Compose containers to isolate multiple applications in virtualized Linux environments

## RELEVANT COURSEWORK

**Undergraduate:** Calculus III, Software Design, Operating Systems, Low Level Programming in C, Object-Oriented Programming in Java, Programming in Python, Wireless Networks and Security, Software Security

**Graduate:** Machine Learning, Computer Vision, Data Structures and Algorithms

## CERTIFICATIONS

**Temple University:** Computer Security & Digital Forensics Certificate

## TECHNICAL SKILLS

**Programming Languages:** Python, HTML5/CSS3/Javascript, Java, C, Matlab

**Frameworks:** Electron, Angular, OpenCV

**Libraries:** NumPy, Matplotlib, PyAutoGui