

# Toby Mickelson

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Portfolio: <https://awaje.github.io/professional/>

## ***Objective***

To pursue a career in computer engineering or robotics.

## ***Education***

### **Northern Virginia Community College**

5000 Dawes Ave, Alexandria, VA

2023-2026 – Associate Degree in Computer Science, expected Spring 2026

### **Arlington Tech at the Arlington Career Center**

816 S Walter Reed Dr, Arlington, VA

2022-2026 – Advanced Diploma

## ***Projects, Activities, and Experience***

### **Leadership Capstone, Arlington Career Center, Arlington, VA – Fall 2025 to Present**

- Teacher's assistant for engineering classes
- Experience with using, fixing, and teaching others how to use laser cutters, 3D printers, and computer controlled (CNC) mills
- Aiding in creation of lesson plans
- Completion of projects for school such as engraving plaques for a high school's sports team and currently creating 150+ Career and Technical Education awards for students nominated by teachers that will be presented later this spring.

### **First Robotics Competition Team #8230 – Fall 2022 to Present**

- Personal experience with computer controlled (CNC) milling and laser cutting along with mechanical/assembly, electrical configuration, and programming
- About 2.5 hours per week during pre/post season (October-December & April-June)
- About 8-16 hours per week during build season (January-April)
- Team has reached state-level competitions each year along with winning multiple awards per year

### **Fundraising for Robotics Team – Fall 2022 to Present**

- Approximately 30 hours of community based yard work per year in fundraising
- Four yard work jobs in the spring with another four in the fall
- Each yard work job lasts four hours and is either from 8-12 or from 12-4

### **Nova Web Development, Arlington, VA – Fall 2022 to Summer 2023**

- Worked as a systems administrator intern
- Email server management, including the migration between two systems and advanced user management in iRedMail
- Website management, including deploying a custom Django framework, along with backing up and removing old deployments
- Automation of tasks in iRedMail and management of an Internet Relay Chat (IRC) logging and reminder bot

## ***Known Systems and Programming Languages***

### **Deep Understanding**

- i3 Prusa 3D Printers and PrusaSlicer (3D printers and slicing software)
- Sienci LongMill, gSender, GCODE/NC files and macros (CNC and CNC software)
- OnShape, FreeCAD, Autodesk Fusion (CAD)
- C, C++, Rust, Python, and BASH/SH
- Linux (including CLI), Microsoft Windows, and MacOS

### **Limited Knowledge**

- HTML, CSS, JavaScript, Java, Assembly (various architectures), and PowerShell
- Able to pick up and learn new programs easily

## ***Certifications***

### **CompTIA Network+ (Valid June 2024 through June 2027)**

- <https://cp.certmetrics.com/comptia/en/public/verify/credential/EL57Q5X6NME4Q3S4>

### **PCEP (Python, October 2023) and CPE (C++, October 2024)**

- <https://verify.openedg.org/?id=L2oz.okoi.OwZG>
- <https://verify.openedg.org/?id=xY9j.K3ZQ.1keO>

### **TestOut Ethical Hacker Pro (February 2025) and TestOut Security Pro (May 2025)**

- <https://certification.testout.com/verifycert/6-1C6-VMHBBK>
- <https://certification.testout.com/verifycert/6-1C6-VPGA8B>