

# James Simmons

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407-701-3245

## Skills and Qualifications

### Python

- Data Science: NumPy, Pandas, PyPlot
- Machine Learning: Torch, Tensorflow
- User Interface: Tkinter, Django

### Linux

- System administration
- Network management
- Database management (SQL)
- Automation (Bash)

### Assorted Tools

- C, Java, Git, Vim

## Work Experience

### AI / Algorithms Engineer II - *Elbit Systems of America, June 2023 - Present*

- Developed Python software components for a machine learning and computer vision pipeline used for military applications
- Target detection and recognition, video motion detection

### Algorithms Engineering Intern - *Elbit Systems of America, July 2022 - June 2023*

- As above, in lesser capacity

### Junior Security Analyst - *Fortress Information Security, May 2019 - August 2019*

- Virtual Security Operations Center (VSOC)
- Ran monthly security audits for clients
- Generated reports on newly announced security vulnerabilities

## Education

### MS, Computer Science - *University of Central Florida, January 2022 - May 2023*

- 4.0 GPA
- Focus Area: Artificial Intelligence and Machine Learning

### BS, Computer Science - *University of Central Florida, August 2018 - December 2021*

- Summa Cum Laude (4.0 GPA)
- Minor in Mathematics
- Burnett Honors College

### Projects - *University of Central Florida*

- Headstone Photograph Processing System
  - Used computer vision techniques to rotate, crop, and parse engraved text within images of headstones for the National Cemeteries Administration
  - You Only Look Once (YOLO), Tesseract OCR, Tkinter Python UI
- Arthropod Detection
  - Adapted the YOLO v4 computer vision model to detect and classify subtypes of insects
- Classical Composer Predictor
  - Developed a computer vision model from scratch to classify classical music by their composer based on the distribution of notes with respect to time
- Product Review Quality Analysis
  - Used BERT (natural language processing technique) to determine the usefulness of reviews of ecommerce products

### Extra-Curricular - *University of Central Florida*

- Secretary, HACK@UCF Cybersecurity Club, 1 year
- Competitor, Collegiate Cyber Defense Competition team, 2 years
  - Business Specialist, National CCDC 2020: 2nd Place
  - Business Specialist, At-Large CCDC 2020: 1st Place
  - Business Specialist, NIATEC Invitational CCDC 2019: 1st Place
  - Linux Specialist, UBNNetDef Lockdown 2019: 2nd Place
- Teacher's Assistant, Computer Science 1, 1 semester