

# Anthony Shea



## Profile Summary

- Data Scientist and Backend Engineer with multi-int fusion expertise.
- Strong foundation in Physics, Mathematics, and Systems Engineering, with proficiency in data analysis, visualization, and reporting.
- Effective communicator skilled at translating complex data into actionable insights for informed decision-making.

## Contact Details

- agshea25@gmail.com  
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 Denver, Colorado

## Personal Information

**Citizenship:** USA

**Clearance:** TS/SCI and CI Poly

**Languages:** English, Russian

## Skills

- Languages: SQL, Python, TypeScript, Go
- ML/DL: PyTorch, Keras, TensorFlow, OpenCV, Scikit-learn
- Databases: Elasticsearch, MySQL, MongoDB
- DevOps: Git/GitLab, Docker, Logstash, Vim
- Imagery: PI, SAR, IR, HSI, FMV, Photogrammetry

## Experience

### Data Scientist at Torch Technologies

*Jan 2025 – Aug 2025*

- Deployed CNN with 92% accuracy, processed 10Gb/day; <1 min latency
- Created 6 data pipelines; streamed data via TCP; processed for database
- Web scraped ephemeris and quaternion data; created footprints
- Mentored entry level data engineers/scientists to deploy models

### Data Scientist at Rampart Technologies

*Jul 2023 – Jan 2025*

- Developed web app for data forecasting with React, Flask, and SQL.
- Created ML and statistical models (ARIMA, Fb Prophet, GARCH, PyTorch) to forecast trends and detect anomalies.
- Displayed results via interactive line graphs, heat maps (H3), text data.
- Created 12 data pipelines with Logstash to extract data from a MySQL database to an Elasticsearch database; used REGEX and Bash scripting to find latest CSV.
- Stood up an Elasticsearch database; created a Kibana dashboard for KPIs and data flow visualization.

### Imagery Analyst / Scientist at US Air Force

*Nov 2011 – Present*

- 95% accuracy on Computer Vision model; enlisted job automated.
- Stationed at Osan AB, RAF Molesworth, Langley AFB, NGA Washington, and NGA Denver, with extensive experience in 1st, 2nd, and 3rd phase analysis of all forms of imagery.
- Served in Active Duty from 2011–2022; 2022-present USAF Reserve Component (IMA). Transitioned to data science in reserves.
- Developed Computer Vision project to automate 1st-phase analysis and photogrammetry using TensorFlow and Keras.
- Scripts query image database APIs, store live inference data in Elasticsearch, and visualize it in Kibana.

## Education

### B.S. Physics, Minor in Mathematics

*Colorado State University — 2019–2025*

All physics coursework complete; only 3 general-education classes remain.

### B.S. Systems Engineering, Mechanical Engineering Focus

*U.S. Air Force Academy — 2015–2019*

All academic requirements complete, degree not awarded.

### Associate of Applied Science, Intelligence Studies

*Community College of the Air Force — 2011–2014*

## Certifications

GEOINT Professional Certification — Imagery Analysis Level II, NGA

## Hobbies

Reading, Rock Climbing, Travel, Learning, Running