## **ERIN M. RAYNSFORD**

Experienced systems engineer and cryptologic analyst with twelve years of experience in the United States Department of Defense supporting roles. Proven ability to foster inter-agency collaboration and communications in a fast-paced, mission-driven environment. Significant operational leadership experience with direct reports of up to twenty individuals. Regular provider of in-depth research and analysis on a range of threat-specific topics culminating in leadership-focused or training-focused presentations. Looking a position in that would allow me to make use of my interest in and knowledge of artificial intelligence, robotics, machine learning, and systems thinking.



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## **EXPERTISE/SKILLS**

- Twelve years serving in many roles within the Air Force and Department of Defense National Intelligence Community
- Over two years experience as a Systems Engineer at CACI International in a C-UAV role
- 4+ years experience working with multiple programming languages and data analysis libraries
  - Data Analysis packages: Numpy/Pandas/Scikit-learn/TensorFlow/PyTorch/OpenCV (3 years)
  - Office Tools: Excel/Word/PowerPoint/Access
  - SysML/MBSE tools: Cameo Systems Modeler/Enterprise Architect (2 years)
  - Software Management Tools: JIRA (2 years), Git (2 years)
  - Programming Languages: C++ (1 year), Python (4 years)
  - Linux (2 years)
  - Docker Containerization (1 year)
  - Signal Processing Frameworks: XMidas (1 year)
- Advanced knowledge of systems engineering and machine learning/deep learning techniques and implementation in a range of applications to include signal processing, computer vision and natural language processing
- Four years of experience in individual and group instruction in a range of skillsets
- Two years of experience in mission supervision and inter-agency collaboration
- Six Sigma Black Belt Certification (05/2018)

## **CLEARANCES AND CERTIFICATES**

Current TS/SCI with CI Polygraph – PR Date: April 2021

# EMPLOYMENT HISTORY

Employer: **CACI International** Employer Address: Sterling, VA

Direct Supervisor: Dave Grondzki, Project Lead, 910-297-0461

11/2019 –

#### Systems Engineer – Software Release Manager

Produce quarterly release systems engineering documents for internal and customer use (Engineering Review Board/Change Control Board, Testing Readiness Review, SE IPT, Test Report, Version Description Document, etc)

➤ Interface between developers and customers; ensure that customer requirements are documented and plan exists for resolution in a quarterly release

- Assist in testing of system functionality; produce system test procedures
- Represent team in weekly organization-wide technical meetings; assist Product Lead in

11/2019 –

program management tasks

➤ Develop system-wide understanding of the product, to include security, infrastructure, user interface, signals processing as well as operational considerations.

Employer: **Hawaii Air National Guard**, 201 Intelligence Squadron

05/2015 -

Employer Address: 25 Loko Drive, Joint Base Pearl Harbor-Hickam, HI 96853 Direct Supervisor: Atilla Boromissza, Cryptologic Linguist, 405-412-3376

#### **COMINT Mission Supervisor**

09/2016 - 11/2019

- Manage local mission crew in order to ensure crew safety and mission effectiveness
- Provide cross-crew and inter-site coordination between various agency partners and mission leadership
- > Ensure timely and accurate reporting and post-mission documentation
- Resolve system technical issues and coordinate with site contract engineer when applicable
- Instruct future Mission Supervisors on duties, responsibilities and guidelines of conduct

#### **Tactical Entity Lead**

05/2015 - 09/2016

- > Ensure accurate and timely reporting of critical mission activities
- Guide task distribution and mission need prioritization for entity operators
- Verify post-mission documentation is accurate and meets local document standards
- Coordinate between entity operators and mission supervisor

Employer: United States Air Force, 324 Intelligence Squadron

04/2010 - 03/2015

Employer Address: Joint Base Pearl Harbor-Hickam, HI 96853 Direct Supervisor: Jaime Angel, Cryptologic Linguist, 808-344-8134

#### **Tactical Entity Lead**

11/2014 - 03/2015

- > Ensure accurate and timely reporting of critical mission activities
- > Guide task distribution and mission need prioritization for entity operators
- Verify post-mission documentation is accurate and meets local document standards
- Coordinate between entity operators and mission supervisor

#### **Tactical Systems Operator**

02/2014 - 11/2014

- Deploy to Afghanistan in support of the Joint Task Force/Operation Enduring Freedom
- Tasked in intelligence support and target development role
- > Gain proficiency on three different communications hardware/software suites
- ➤ Give daily situational awareness and personnel recovery briefing to local crew and site leadership

#### **Mission Planner**

07/2013 - 02/2014

- ➤ Ensure inter-site communications, preparations and distribution of daily pre-mission briefings materials
- Write and compile local Standard Operating Procedures for new Mission Planning Cell
- Research and analyze multi-source intelligence reporting to provide operators with relevant tactical and strategic updates

- > Brief site leadership on relevant daily activities and operations
- > Produce mission essential pre-mission briefing PowerPoint presentation

#### **Cryptologic Analyst/Instructor**

06/2012 - 07/2013

- > Cryptologic Analyst, Analyst, Reporter and Instructor
- Operate voice communications equipment, conduct frequency search missions, assist in the operation of direction-finding equipment
- Responsible for recognizing, translating, analyzing and issuing real-time reporting on critical activities
- Operate a wide variety of computer based collection, analysis, reporting applications and systems
- Train and mentor new collection operators on all aspects of collection, processing and mission reporting

#### **ADDITIONAL DUTIES**

Systems Account Administrator – Manage the creation and maintenance of mission essential systems accounts

#### **ACCOMPLISHMENTS/AWARDS**

Air Force Commendation Medal, 2015

# **EDUCATION**

Master of Engineering – Systems Engineering Cornell University, - Expected graduation May 2022 - Current GPA 3.42	01/2018 – 05/2022
Graduate Certificate - Computational and Data Science Cornell University	09/2018 – 05/2019
Bachelor of Science – Applied Mathematics Hawaii Pacific University - Overall GPA 3.43 - Dean's List (FY 2015)	10/2013 – 12/2017
Associate of Science – Intelligence Studies and Technology, Community College of the Air Force	03/2010 – 12/2017
Associate of Arts – Chinese Studies, Defense Language Institute - Overall GPA 3.3	08/2010 – 12/2011
TRAINING	
Graduate of Airman Leadership School, Honolulu, HI - Sponsored by 201 Intelligence Squadron - Approximately 160 hours of instruction	10/2015 – 11/2015
<ul> <li>Mandarin Chinese Language Training, Defense Language Institute, Monterey, CA</li> <li>Sponsored by the 316<sup>th</sup> Intelligence Squadron</li> <li>Full-time instruction; 50 hours of instruction per week</li> </ul>	08/2010 – 12/2011
VOLUNTEER	

## Habitat for Humanity – Honolulu, HI

At least 85 hours in support of local Oahu Habitat for Humanity helping to build homes for local Hawaiian families.

04/2012 – 11/2016

07/2014 - 10/2015

### Military Hospital Volunteer – Bagram, Afghanistan

At least 150 hours as a volunteer at Bagram Air Force Base Military Hospital, where I was responsible for assisting US, allied and Afghan civilian patients, as well as providing clean-up and general administrative functions.