

# ANDREW KING

Phone: (206) 925 3209 | Email: mail@AndrewKing.ai | TS/SCI Clearance  
Website: www.AndrewKing.ai | GitHub: AndrewCKing | LinkedIn: AndrewKingio

---

## EXPERIENCE

---

### SENIOR MACHINE LEARNING ENGINEER

*NextGen Federal*

Remote

April 2021 - Present

- Spearheading deep learning initiatives and the application of generative AI across diverse Air Force Weather contracts, which include the Global Synthetic Weather Radar (GSWR), the Commercial Weather Data Pilot for GSWR Lightning, and Contrail Formation Modeling.
- Driving the research, development, and implementation of advanced machine learning models, inclusive of generative AI and diverse deep learning architectures such as CNNs, FCNs, GANs, and diffusion models.
- Demonstrated expertise in applying models to diverse data modalities, with a particular emphasis on computer vision and natural language processing, to achieve superior results.

### MACHINE LEARNING RESEARCH ENGINEER

*Leidos*

Reston, VA

Oct 2019 - April 2021

- Acted as machine learning algorithm lead for a project in the geospatial intelligence domain. Utilized a variety of deep learning techniques such as sparse convolutional neural networks and LSTMs.
- Acted as principal investigator for a machine learning research project in the radio frequency (RF) domain. Explored the use of region-based convolutional neural networks for signal detection and estimation.
- Awarded the Leidos Innovation Center Award for Technical Excellence in the first quarter of 2020.

### MACHINE LEARNING DEVELOPER

*Ellucian, Applied Research*

Reston, VA

May 2018 - Oct 2019

- Spearheaded machine learning research and product enhancements in the higher education administrative space while also working in close collaboration with architects and developers to establish a cloud-based ML infrastructure

---

## EDUCATION

---

### UNIVERSITY OF GEORGIA - 3.94/4.0 GPA

*Artificial Intelligence - M.S.*

Athens, GA

May 2018

Attained a master's degree in Artificial Intelligence. Thesis explored fully convolutional deep learning architectures for semantic segmentation of image data. Coursework included a variety of topics including natural language processing, computer vision, deep learning, and biomedical image analysis.

### SOUTHERN VIRGINIA UNIVERSITY - 3.87/4.0 GPA

*Computer Science, Business Management - B.A.*

Buena Vista, VA

June 2016

Completed a bachelor's degree with majors in both computer science and business management. Maintained a computer science major GPA of 4.0. Served as president and founder of the Southern Virginia University Robotics Club and as the chair of the Southern Virginia University ACM student chapter.

---

## ACADEMIC PUBLICATIONS

---

Deep Learning for Semantic Segmentation of Coral Reef Images Using Multi-View Information  
Andrew King, Suchendra Bhandarkar, Brian Hopkinson  
Conference on Computer Vision and Pattern Recognition (CVPR) Workshops, 2019

Python

PyTorch & Tensorflow

Java

OpenCV

Automated Classification of Three-Dimensional Reconstructions of Coral Reefs using CNNs  
Brian Hopkinson, Andrew King, Daniel Owen, et al.  
PLoS ONE 15(3): e0230671, 2020

C#

Pandas & Dask

C++

HuggingFace

A Comparison of Deep Learning Methods for Semantic Segmentation of Coral Reef Survey Images  
Andrew King, Suchendra Bhandarkar, Brian Hopkinson  
Conference on Computer Vision and Pattern Recognition (CVPR) Workshops, 2018

AWS

Numpy & SciPy

---

## PROFICIENCIES

---