

# Bryan Barrows

Virginia Beach, VA

-Email me on Indeed: <http://www.indeed.com/r/Bryan-Barrows/12f91c82cd8de003>

## Work Experience

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### **Aerospace Research Engineer**

National Aeronautics and Space Administration (NASA) at Langley Research Center, - Hampton, VA

January 2018 to Present

- Role: Data scientist, Human-Machine Interaction (HMI) specialist, hazards and feasibility analyst for Advanced Air Mobility (AAM) and Autonomy Teaming and TRAjectories for Complex Trusted Operational Reliability (ATTRACTOR) projects.
- 4 years of experience with machine learning research and development. Topics include: Natural Language Processing (NLP), classic supervised ML (kNN, SVM, Naive Bayes, random forest, decision trees), HMMs, CNNs, RNN/LSTMs, GANs, and transformers.
- 3 years of focused experience with NLP, ensemble supervised machine learning models, automatic speech recognition and machine vision applications.
- Research experiment design, control, data analysis and data publishing.

National Aeronautics and Space Administration (NASA) Summer Internships and Co-op

Langley Research Center - Hampton, VA

(2011 - 2017)

- 2016-2017, Summer: Ensemble supervised machine learning and semi-supervised modeling for decluttering navigation display technologies and informing aircraft operations in high-density airspaces.
- 2015, Summer: Developed a machine learning user interface toolbox for automation integration and analysis of pilot flight simulator data.
- 2011-2014, Summer: Multithreaded multi-sensor image fusion prototyping for navigation displays and supervised ML classification of pilot crew state using psychophysiological sensor data.

## Education

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### **Master of Science in Mechanical Engineering**

Virginia Polytechnic Institute and State University - Blacksburg, VA

December 2017

### **Bachelor of Science in Mechanical Engineering**

Old Dominion University - Norfolk, VA

May 2015

## Skills

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- C
- Data science
- iOS

- NumPy
- Deep learning
- Visual Basic
- PyTorch
- JavaScript
- Objective-C
- Natural language processing
- Application development
- Computer networking
- Python
- TensorFlow
- Computer operation
- Java
- C++
- CSS
- SciPy
- Google Cloud Platform
- Hadoop
- Mobile applications
- Clustering
- jQuery
- OpenCV
- Machine learning
- HTML5