



BRENDAN HIGGINS

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EXPERIENCE

- 2017
- GE Aviation (Lynn, MA) - EEDP**
- Developed engine health monitoring software to predict and isolate engine failures
 - Worked exclusively with Python libraries
 - Integrated machine learning model and live web interface to expedite flight testing
 - Designed, debugged and tested military helicopter engine control logic
- 2016
- GE Aviation (Lynn, MA) - EEDP**
- Redesigned starter gear and gearbox housing to save \$275/engine and \$2500/engine
 - Led initiative to develop internal ultrapolish process projected to save \$1000 per blisk and 5 days of cycle time
- 2015
- GE Aviation (Lynn, MA) - EEDP**
- Performed extensive trade studies on fan blade containment
 - Redesigned more durable compressor variable geometry linkage to save \$800/engine
 - Assisted with root cause analysis of composite delamination and developed interim containment plan
- 2014
- Cornell Racing FSAE (Ithaca, NY)**
- Lubrication Subteam Leader
 - Designed internal dry sump oil pump that saved 2 lbs. and won 2nd place (\$500) for Altair's Innovative Intelligence Award
- 2013
- GE Aviation (Evendale, OH)**
- External Configurations Intern
 - Performed thermal analysis & fire testing
 - Executed proof and burst calculations

EDUCATION

Boston University - May 2017
Master of Science - Mechanical Eng
Robotics Specialization - GPA: 3.65

Cornell University - May 2014
Bachelor of Science - Mechanical Eng
Graduated Cum Laude - GPA: 3.62

MASTERS PROJECTS

- March Madness Predictions**
- Performed rigorous feature engineering and selection
 - Developed model in Scikit-Learn that would place top 13% on Kaggle

- Optical Character Recognition**
- Developed deep neural network classifier in Tensorflow
 - Achieved 94% accuracy on 52 upper and lowercase letters
 - Created OCR program

- Robot Motion Planning**
- Detected and classified natural objects in aerial image using SVM with RBF kernel
 - Implemented A* algorithm to plan optimal path for autonomous robot

SKILLS

