

Alexander Behnke

PROFILE

Computer Engineer looking to use mathematics, computer science, and engineering techniques to solve quantitative problems.

CONTACT

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SKILLS

Machine Learning
Computer Vision
Image Processing

LANGUAGES

Advanced:
MATLAB

Proficient:
Python
TensorFlow
Java

C
Latex
Windows & Linux OS

Familiar:
Scala
Ocaml
Racket
Verilog

INTERESTS

Data Science
Deep Learning
Autonomous Vehicles

EDUCATION

Sc.B. Computer Engineering - Brown University
Sept 2013 - May 2017, GPA: 3.43

Relevant courses include Design and Analysis of Algorithms, Natural Language Processing, Machine Learning & Pattern Recognition, Computer Vision, Linear Systems Analysis, Digital Electronics System Design, and Computer Systems.

Fraser High School

Sept 2009 - May 2017, GPA: 3.99

Class of 2013 Salutatorian, 5 Varsity Letters, and Business Professionals of America national competition finalist.

PROFESSIONAL EXPERIENCE

Software Engineer - Northrop Grumman Aerospace Systems
July 2017 - Present

Design, implement, and run test cases for the Integrated Mission Management Computer aboard the NAVY Broad Area Maritime Surveillance Unmanned Aerial Vehicle. Increase efficiency of test team and communication with project management by implementing various process related software tools.

Research Intern - Rhode Island Hospital & Brown LEMS Lab
May 2016 - May 2017

Designed and built software to assist physicians in tumor ablation procedures. Algorithm showed high accuracy using 2D to 3D registration.

RELATED PROJECTS

Attrition Prediction - Northrop Grumman Enterprise Analytics
August 2017

Cleaned and transformed a categorical and numerical dataset into a normalized, numeric only dataset. Created synthetic data to increase accuracy with Deep Learning models. Built and trained multiple machine learning models including SVM, KNN, 1, and 2 Layer Feed Forward Neural Networks in TensorFlow and Python.

Machine Learning & Pattern Recognition - Brown University
Jan 2017 - May 2017

Built and trained a multi-class support vector machine to assign classes to handwritten digits with 85% accuracy.

Computer Vision - Brown University
Jan 2017 - May 2017

Designed and trained a deep convolutional neural net for scene recognition using MatConvNet toolbox: neural net produced 90% accuracy on average.

Natural Language Processing - Brown University
Jan 2016 - May 2016

Tagged parts of speech in Wall Street Journal articles using a Hidden Markov Model. Produced a tagging accuracy above 90%.

LEADERSHIP

Teaching Assistant, Dynamics and Vibrations - Brown University
Jan 2017 - May 2017

Engaged with students during T.A. hours to deepen their understanding of the material through weekly problem sets and design projects in MATLAB.

Group Tutor, Calculus 3 - Brown University
Sept 2016 - May 2017

Tutored 2 groups of 5 students following Brown's multi-variable calculus curriculum. Designed lesson plans while incorporating student feedback and needs into future sessions.