

Andrew Chan

SKILLS **Machine Learning** – Python, TensorFlow, Keras, Scikit-learn
Object Oriented Programming – Java, C++
Databases – MongoDB, SQL, Neo4j

WORK HISTORY **AI SOFTWARE ENGINEER, NORTHROP GRUMMAN, EL SEGUNDO, CA**

September 2020 – Present

Data Analytics—created a data analytics platform using MongoDB, Node.js, and Neo4j to improve first time quality of engineering models by processing 400k+ model artifacts, identifying defects, trending model health, and integrating stakeholder needs.

SOFTWARE ENGINEER, NORTHROP GRUMMAN, EL SEGUNDO, CA

October 2019 - October 2020

Computer Vision — created an image classification pipeline for 4 terabytes of image data. Used regex parsing via Python for data preprocessing, Keras for scratch training of LeNet architectures and transfer learning using pretrained VGG, ResNet, and Inception networks.

Natural Language Processing — created a sentiment analysis system utilizing Scikit-learn. Used stop word reduction, data balancing, regex replacement.

Anomaly Detection — programmed IOT embedded sensors via Python and C++, wrote bash scripts for automated data collection, used Scikit-learn for anomaly detection.

SYSTEMS ENGINEER, NORTHROP GRUMMAN, EL SEGUNDO, CA

October 2016 – October 2019

Systems Architecture — captured complex systems via Model Based Systems Engineering (MBSE). Wrote plugins in Java and macros in JavaScript to automate population and extraction of model content, reducing 100+ hours of manual labor.

**INTERN: RESEARCH AND DEVELOPMENT AUTOMATIC TESTING EQUIPMENT
BOSTON SCIENTIFIC NEUROMODULATION DIVISION, VALENCIA, CA**

June 2015 – September 2015

Developed a test system for wireless charging characteristics using LabVIEW code to control source measure units, DAQs, digitizers, and function generators. Created validation procedures for automated testing of medical devices utilizing oscilloscopes, source meters, and function generators.

EDUCATION **M.S., COMPUTER SCIENCE, JOHNS HOPKINS UNIVERSITY, 2018-PRESENT**

Database Systems and Knowledge Management Track

Relevant Courses: Intro to ML, Applied ML, Statistical Methods for Computer Science

B.S., ELECTRICAL ENGINEERING, UNIVERSITY OF CALIFORNIA, LOS ANGELES (UCLA), 2012-16

Computer Science Technical Breadth