# Brian Bao Nguyen

217 S. Atherton Street Apt. 201 | State College, PA | thebrianbn@gmail.com | 215-528-1527

## **EDUCATION**

## THE PENNSYLVANIA STATE UNIVERSITY

BACHELOR OF SCIENCE
COMPUTATIONAL DATA SCIENCE

Expected May 2019 | State College, PA College of Engineering

Dean's List (5/6 Semesters)

Cum. GPA: 3.79 / 4.00

Organizations:

Mu Sigma Rho - Stat. Honors Society Association of Computing Machinery Asian American Students in Action

## **COURSEWORK**

## **UNDERGRADUATE**

Artificial Intelligence Computer Vision Data Structures & Algorithms Concurrent Programming Advanced Database Concepts Statistical Inference

## SKILLS

#### **PROGRAMMING**

Python • C/C++ • Java • R • MySQL Spark • Javascript • HTML • CSS

#### **MACHINE LEARNING**

Random Forest • LSTM • CNN Logistic Regression • K-Means Clust. Hidden Markov Model • NLP

#### **LIBRARIES**

pandas • numpy • sklearn gensim • bokeh • matplotlib

#### **FRAMEWORKS**

Tensorflow • Django • keras

#### **SOFTWARES**

Tableau • Excel • Github Agile • Docker • Hadoop

## **AWARDS**

2018 Finalist ASA Datafest2018 11th CodePSU2017 2nd Predix Hackathon

## LINKS

Github://thebrianbn LinkedIn://thebrianbn

#### RFI FVANT WORK FXPFRIFNCE

#### WISE.IO | DATA SCIENCE INTERN

May 2018 - August 2018 | San Francisco, CA

- Designed a Python grid-search API for use on production models in the stack.
- Made a learning rate scheduler callback for the deep learning module.
- Added gensim natural language processing features to field service recommender system. Resulted in 5.6% increase to recall of similar tickets.
- Tuned metrics used for convolutional neural network ensemble model voting.
- Constructed unit & functional tests for 100% code coverage on Jenkins server.

## GENERAL ELECTRIC (GE DIGITAL) | DATA SCIENCE INTERN

June 2017 - August 2017 | San Ramon, CA

- Produced machine learning models to detect anomalies in time series sensor data from industrial assets. Increase of 3.5% to F1 score from previous method.
- Created a methodology to generate ground truth data for various use cases and evaluation. Resulted in complete automation of the evaluation process.
- Invented an issued patent for the new methodology to generalize evaluation.
- Scoped out effectiveness of industrial Internet of Things assets.

## **EMAGINATION TECH | NETWORK ENGINEER INTERN**

June 2016 - August 2016 | Boston, MA & Rosemont, PA

- Set up 5 LAN and VLANs to servers for corporate use.
- Monitored and troubleshot, on average, 6 daily computer and network issues.
- Automated database cleaning and backup via Python scripts.

## PENN STATE INFORMATION TECHNOLOGY | SENIOR SUPERVISOR

December 2015 - Present | University Park, PA

- Coordinating meetings, trainings, and events for 25 student employees.
- Providing effective technical communication, presentations, and demos of software to clients. Held 51 technical consultations.
- Running exploratory data analysis of ServiceNow employee data to analyze effectiveness of employee performance.

## LEADERSHIP & ACADEMIC EXPERIENCE

## **HUMAN TECHNOLOGY INTERACTION LAB** | RESEARCHER

April 2018 - December 2018 | University Park, PA

- Deploying a car collision predictor based on human reaction data to connected vehicle system warnings using Tensorflow and sklearn.
- Utilizing a mixture of machine and deep learning models for ensembling.
- Researching in conjunction with the College of Engineering Research Initiative.

#### THON TECHNOLOGY COMMITTEE | Captain & Developer

April 2018 - Present | University Park, PA

- Developing a guiz platform and database using the Python Django framework.
- Implementing a Redis cache for increase in efficiency of database.
- Working in an agile environment for continuous integration and development.

## NITTANY DATA LABS | PROJECT MANAGER

January 2016 - Present | University Park, PA

- Leading a team of 5 undergraduates to complete their first hands-on data science project involving housing price regression by using Python and Tableau.
- Teaching all aspects of the data science pipeline and technical presentation.