

# Shen Huang

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## EDUCATION

**California State University, Northridge**, Northridge, California, USA      September 2017 - June 2019 (Expected)  
MS in Computer Science  
**Queens University**, Kingston, Ontario, Canada      June 2015  
BS in Electrical Engineering

## SKILLS

**Programming Languages:** Octave, MATLAB, Python, Java, Julia  
**Data Science Frameworks:** scikit-learn (auto-sklearn), Keras (AutoKeras), WEKA (Auto-WEKA)  
**Data Science Knowledge:** Probability & Statistics, Machine Learning, Deep Learning  
**Cloud Frameworks:** GCP, AWS (SageMaker, Rekognition)  
**Visualization Frameworks:** Matplotlib, Excel, Tableau

## WORK EXPERIENCE

**Teaching Assistant @ NSF Data Science Camp**      Starting September 2018

- Helped Students to be familiar with concepts and practice in Data Science, Artificial Intelligence and Cloud Computing Platforms.
- Made correct judgement on the best model before experimentation, improved several works by fine tuning the models.

**Graduate Assistant**      Starting September 2018

- Assisted the professor with research tasks including code production.
- Analyzed Behavioral Biometrics data with WEKA, scikit-learn and auto-sklearn.
- Created data visualizations with Octave, Excel and Matplotlib.

**Software Engineer Internship, CETC Motor**      July 2013 - September 2013

- Worked on a compiler to support floating point calculation by modifying the lexical and syntax analyzer.
- Added English and Chinese support for help documents.

**Electrical Engineer Internship, State Grid Corporation of China**      July 2012 - September 2012

- Designed and Implemented a Java application to help managing error reports.
- Collaborated with six other engineers to validate the integrity of the communication system between the distribution station and the headquarters.

## PROJECTS

### Research on Behavioral Biometrics

- First paper accepted by IEEE HIS 2020, as first author.
- Feature Engineered 17 different Behavioral Biometrics features, generalized from literature review.
- Build and trained a Generative Adversarial Network (GANs) to process data.
- Conducted AutoML analysis on the extracted features familiar with common Machine Learning and Feature Engineering algorithms, as well as Automated Feature & Model Selection algorithms.

### Artificial Neural Network in C# for Unity

- Wrote an Artificial Neural Network from scratch (Including conversion of probabilistic distributions). This was done in demand of a group project before Unity Machine Learning Framework was mature. The Neural Network was train through Back Propagation, where the only one can be found online back then was trained through Genetic Algorithm.

### Translation & Subtitling for fast.ai

- Performed translation and subtitling tasks for courses on fast.ai cooperating with 大数据文摘.

### Technical Writer on Medium

- Articles curated by Medium and accepted by Towards Data Science.
- Articles also accepted by Hacker Noon, The Startup, freeCodeCamp.org and Frontend Weekly in the past.

### Queens ECE Annual Robot Competition, 1<sup>st</sup> Place

- Designed a slam-dunk robot, code based on Arduino. Robot moves and grabs with servo motors utilizing Pulse Width Modulation. Robot senses the environment through touch sensor and distance sensors, and therefore was designed to have a close loop control system to adjust the speed for optimal performance.