

# (Harvey) Yu Hou

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## Objective

- Looking for full time **SDE / Full-Stack** position starting from Spring 2019.

## Education

### **Northeastern University, Boston, MA**

Master of Science in Computer Engineering – GPA: 3.686

Anticipated Graduation: Dec 2018

Courses: Object Oriented Programming, Database System, Computer Network, Pattern Recognition and Machine Learning, Data Visualization, Parallel Data Processing, Computer Architecture

### **Tianjin University of Science and Technology, Tianjin, China**

Bachelor of Engineering in Automation – GPA: 3.45

June 2016

Awards: First Prize – China Undergraduate Mathematical Modeling Contest in Tianjin Province

## Technical Skills

- Computer Languages: **JAVA** (proficient), Python(proficient), **JavaScript**, SQL, shell
- Computer skills: GIT, **AWS** (Alexa, Lex, Lambda function), **Django**, React, **Node.js**, JQuery, Bootstrap, Swing
- Computer Tools: MySQL, Postman, PostgreSQL, Eclipse, IntelliJ, PyCharm, Spark, Visual Studio, JIRA

## Job Experience

### ➤ **Software Development Co-op**

Orig3n, Boston, United States of America

July 2017-Dec 2017

- Integrated **AWS** Lex chat bot into Orig3n website using lambda function, built up user interaction interface.
- Designed the model of subscription product, and implemented the creation, editing page for the product.
- Developed the registration page for Baltimore Ravens' DNA day event using **Django** and Postgres.
- Implemented unit test on the Django framework.

### ➤ **Full Stack Developer Intern**

Bettem Corporation, Shanxi, China

Nov 2015-Mar 2016

- Developed an online lottery module for a conference software using **Bootstrap**, **React** and **Node.js**. Meeting conductor can draw lottery for all the participants.

## Course Project Experience

### ➤ **Financial Tracking System based on JDBC and Swing Framework**, Team member

Northeastern University, Boston, MA

Jan 2017-Apr 2017

- Built the relational model using MySQL and implement functionalities using JDBC and Swing Framework.
- The financial system allows users to track their net finances (income, expenses, etc.) on an individual and group-basis. Logs of these instances may be categorized and displayed to the user to provide insight on one's financial habits.

### ➤ **Face Detection Based on PCA and SVM**, Team member

Northeastern University, Boston, MA

Nov 2016-Dec 2016

- Normalized pixel values of all samples, separated data into training set and validation sets, then, reduced data dimensionality through PCA.
- Trained the SVM classifier with a quadratic programming algorithm and a polynomial kernel function.
- Validated the detector with a scanning window method and non-maximal suppression.

### ➤ **Perceptron-based Branch Prediction**, Individual

Northeastern University, Boston, MA

Nov 2016-Dec 2016

- Improved the flow in the instruction pipeline by replacing the pattern history table in two-level predictors with a table of perceptrons.
- Utilized dynamic training algorithms to update weights according to branch history information.
- Evaluated the performance with infinite and fixed hardware budgets respectively.
- Supplemented the branch history with local history records of each branch.

## Links

- GitHub: <https://github.com/harveyaya>
- Website: [www.harveyaya.com](http://www.harveyaya.com)