

# Miffy Chen

Software Engineer  
Full-Stack Developer

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## 🎓 EDUCATION BOSTON UNIVERSITY @ (Boston, MA)

📖 MASTER OF SCIENCE IN COMPUTER SCIENCE | GPA: 4.0/4.0 Sept 2017 – May 2020

- Data Structures
- Analysis of Algorithms
- Computer Networks
- Computer Architecture
- Adv. Programming Techniques
- Software Engineering
- Software Quality, Testing, & Security Management

🎓 BACHELOR OF ARTS IN PSYCHOLOGICAL & BRAIN SCIENCE Sept 2011 – May 2015

- Senior Research
- Statistics
- Developmental / Learning / Personality / Social / Family / Abnormal / Clinical

## ⚙️ TECHNICAL SKILLS

### LANGUAGES

Java, C, C++, C#, Python,  
HTML, Haml, CSS, SCSS,  
JavaScript, ES6

### FRAMEWORKS

Vue.js, React.js,  
Bootstrap, Jekyll,  
Spring-Boot, Node.js

### TOOLS

Git, GitHub,  
Postman API, Insomnia,  
MySQL, MongoDB

### OS

Android, Ubuntu,  
Raspbian, Linux Mint

## 🏆 HACHATHONS

HACK(H)ER413 @ UMass Amherst | \*Recipient of Best Use of Google Cloud Platform Award\* Feb 09 – 10, 2019

- Built a **Machine Learning Model** that identifies breed combinations of mix-bred dogs and cats to help raise adoption rates in animal shelters using **Google Cloud AutoML Vision**. Achieved an accuracy rate of 97.04% with the custom-trained model, a 3.259% improvement from using the pre-trained model of **Google Cloud Vision API**.
- Built a web UI with **REST API** that executes **Serverless Application Scripts** stored on **Google Cloud Functions**.

GOOGLE CLOUD & NCAA@ HACKATHON @ MIT Media Lab Jan 26, 2019

- Built a machine learning model that identifies winning patterns of every NCAA basketball team in relation to game time using **Python**, **Keras**, and **TensorFlow**, and predicts favorable win conditions against different teams.
- Identified key event variables from basketball game logs over the past 10 years, such as turnovers, steals, blocks, etc., using **BigQuery** and **Data Studio** on **Google Cloud**. Collaborated with a team of 4 others using **Google Colab**.

MLH LOCAL HACK DAY @ Boston University | BostonHacks Dec 01, 2018

- Built a dating app and web service modeled after Tinder that matches users based on music currently listening to or song selected using **Spotify's API**, with optional features for text messaging using **Firestore**, and voice calling using **VoIP**, after matching. Written with **Bootstrap** and **Android Studio**.

## 🚀 PROJECTS

### TRIO (3-IN-1 PROJECT MANAGEMENT TOOL)

- Built a website for project management using **Vue.js**, powered by **Spring-Boot** and **Maven**, with **MySQL & Firestore** as database, and **Firestore** for authentication through **email**, **Google**, **Facebook**, and **GitHub**; hosted on **AWS**.
- Components include: PM dashboard, real-time cloud messaging, email alerts, version control, and issue tracker.

### CPU SCHEDULING SIMULATOR

- Created an interactive **GUI** using **Java Swing** and **JavaFX** that simulates tasks scheduling as handled by the CPU.
- Displayed results in Gantt Charts, with option to save or import numeric datasets using **MySQL** as database.
- Algorithms implemented included: FCFS, Pre-emptive SJF, Lottery, Round-Robin, and Multi-level Priority Queues.

### RASPBERRY PI ALEXA (DIY AMAZON ECHO)

- Converted the **Raspberry Pi** into a functioning Echo Dot by using the **Alexa Voice Service (AVS)** library on **Amazon Web Services (AWS)**.

### RASPBERRY PI SURVEILLANCE CAM + WEB SERVER

- Built a surveillance camera using the **Raspberry Pi 3** motherboard in **Raspbian OS**, hooked up to a custom web server set up using **SSH**, with configurable settings through an **Android** device.