# Catherine Chen

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### **EDUCATION**

#### **WELLESLEY COLLEGE**

BA IN COMPUTER SCIENCE,

**FRENCH** 

Exp. May 2019 | Wellesley, MA GPA: 3.54

#### **AIX-MARSEILLE UNIVERSITY**

FALL 2017 STUDY ABROAD

Aix-en-Provence, France

#### LINKS

Github:// catocity LinkedIn:// catocity

## **COURSEWORK**

Intro to Machine Learning
Artificial Intelligence
Data Structures
Fundamental Algorithms
Theory of Computation
Linear Algebra
Computer Systems
Combinatorics & Graph Theory
Statistics (Spring 2019)
Databases (Spring 2019)

# SKILLS

#### **PROGRAMMING**

Python • Ruby on Rails • React • Java

• HTML5 • CSS3/SASS • R

#### **TOOLS**

Git • Jira • MS Office • Photoshop • Lightroom

#### **LANGUAGES**

English • French • Chinese

# INTERESTS

Running Photography Cinematography Video editing Guitar Piano

#### **EXPERIENCE**

#### PATIENTSLIKEME | Engineering Intern

June - Aug 2018 | Cambridge, MA

- Wrote ~2000 lines of code for a monolithic web app using Ruby on Rails and React
- Implemented adminable functionality which enables departments outside of Engineering the ability to make changes to the website to increase user retention
- Worked on a team of 10 to gain experience with the best practices in the Agile and Scrum development cycles
- Utilized a test driven development workflow
- Managed code with unit tests (Rails/Jest+Enzyme) and version control via GitHub
- Presented on technical subjects to a team of 30+ engineers

#### **UNIVERSITY OF MASSACHUSETTS** | RESEARCH ASSISTANT

June - Aug 2017 | Amherst, MA

- Used machine learning techniques to conduct research in XAI
- Examined data from 283 Atari Breakout games played by Google Deepmind's CNN
- Wrote scripts in Python (pandas, sci-kit) to perform importance analysis on nodes
- Used the Mann-Whitney U test to successfully correlate high activation values to distinct game features

#### **RESPONSE TWO | BACK-END DEVELOPER INTERN**

May - Aug 2017 | Los Angeles, CA

- Created test cases for an optical character recognition program to parse documents and images for text
- Wrote Python scripts to test the platform's Elasticsearch cluster capacity

# LEADERSHIP/INVOLVEMENT

#### WELLESLEY TRACK & FIELD TEAM | CAPTAIN

Feb 2016 - Present | Wellesley, MA

- Meet weekly with coaches, sports administration staff, and other captains to discuss team leadership, culture, and performance
- Train 14 hrs/week: 400m hurdles school record holder
- Collaborated with head coach to create a team handbook that outlines team expectations and serves as a resource for current and incoming athletes

# **WELLESLEY SWIMMING & DIVING TEAM** | VARSITY ATHLETE Sept 2015 - Feb 2017 | Wellesley, MA

- Two-time Seven Sisters All Conference Team (2016, 2017), 2016 NEWMAC All Conference Team, 200 Medley Relay school record holder
- Communicated with prospective swimmers to increase commitment rate
- Organized and oversaw team bonding activities during recruiting visits

#### **PROJECTS**

#### APPLICATION OF ML TO START-UP INVESTING | TECH LEAD

Sept 2018 - Dec 2018 | Wellesley, MA

- Independent study course focused on applying ML/AI methods to help a venture capital firm, Glasswing Ventures, identify seed-stage start-ups to fund
- Provided technical expertise to a team of 4 other students
- Programmed in Python (pandas, sci-kit) to analyze data acquired from CrunchBase

# NATURAL LANGUAGE GENERATION COMPARISON | TEAM MEMBER

Jan - May 2018 | Wellesley, MA

- Collaborated with two other students to explore the performance of computer generated song lyrics through the comparison of two language models: Markov chains and recurrent neural networks.
- Presented findings in a department-wide open house lecture