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**Jesse Zexi Cai**

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## EXPERIENCE

**Blend** San Francisco, California

*June 2017 - September 2017*

*Data Analytics Intern*

Built ETL batch and real-time data pipelines based on lambda architecture. Trained an RNN to predict whether a user would submit a loan application given user activity chains with 90% accuracy. Created an extendable testing framework for data integrity of data warehouse.

**NASA Jet Propulsion Laboratory** Pasadena, California

*June 2016 - February 2017*

*Software Engineering and Computing Systems Intern IV*

Created several web applications using Flask, SQLAlchemy, and PostgreSQL. Improved Elasticsearch search results by filtering by popularity. Used Stanford DeepDive and MITIE to create RDF triple stores to improve an in house question answering system built off of YodaQA.

**Association of Computing Machinery** Los Angeles, California

*December 2015 - March 2017*

*President - UCLA ACM AI*

In charge of creating workshops and projects about robotics, computer vision, artificial intelligence, and machine learning that drew over 200 total attendees. Also worked with faculty to host a Research Fair to connect students with research labs. Received the ACM Student Chapter Excellence Award in 2017.

**University of California Berkeley** Berkeley, California

*May 2014 - September 2014*

*Summer Intern*

Wrote tic-tac-toe game using the minimax algorithm in Scheme and alpha-beta pruning. Found and fixed bugs regarding unnecessary printouts in CS61AS final project (Python interpreter in Scheme).

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## PROJECTS

**Twitter Sentiment Analysis** (Tensorflow, Python)

Created an RNN model with LSTM cells to predict the sentiment of tweets. Trained on ~10000 tweets with custom word embeddings and achieved a 70% test accuracy.

**TeraML** (Python, CSS/HTML/JS, Django, MongoDB)

Machine learning framework that uses Teradata's REST API to access datasets. Includes PCA, K-means, and a collaborative filtering recommender systems.

**Technical Blog** (<https://jcaip.github.io>)

A technical blog about all my side projects. Most posts are about machine learning, artificial intelligence, and algorithms. Also contains many useful links and resources to learn more about computer science.

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## EDUCATION

**University of California Los Angeles**

*September 2015 - Expected June 2019*

*B.S. in Computer Science and Engineering, Upper Division Major GPA: 3.48 GPA: 3.23*

Relevant coursework: CS 111 Operating Systems, CS161 Artificial Intelligence, CS180 Algorithms and Complexity, CS M151B Computer Architecture, CS188 Computational Medical Imaging

**Coursera (Stanford)**

*September 2015*

*Machine Learning, Passed with a 94.1%*

Linear/logistic regression, neural networks, SVM, k-means, and large scale ML in Octave.

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## SKILLS

7+ years experience with GNU/Linux, the command line, vim, and git • Chinese (R/S/W)

Fluent in Python, C, C++ • Competent in Scheme, Haskell, and Javascript