JOSUÉ J. ALFARO

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EDUCATION The University of Texas at Austin

M.S. in Computer Science

GPA: 3.8 / 4.0

Relevant Courses: Natural Language Processing, Deep Learning,

Math in Deep Learning, Grounded Natural Language Processing, AI in Health

Fellowship: Gates Millennium Scholar 2013

The University of Texas at Austin

B.S. in Electrical and Computer Engineering

GPA: 3.7 / 4.0

Relevant Courses: Data Structures, Algorithms, Operating Systems,

Concurrent and Distributed Systems, Computer Architecture

Scholarships: Gates Millennium Scholar 2013, Terry Foundation Scholar 2013

EXPERIENCE

Strangeworks

Software Engineer Intern

Tech Used: Go, Python, mySQL, Docker, Kubernetes, Google Cloud, Git

- \mapsto Developed REST API to interact with customized Jupyter Notebooks
- \mapsto Deployed a customized JupyterHub on GCP

Honest Dollar

Software Engineer Tech Used: RxJava, Spring, MongoDB, Git

- \mapsto Implemented reactive microservices (with REST API)
- \mapsto Developed infrastructure for mass migration onto new platform

Goldman Sachs Group, Inc.

06/2016 - 08/2016

08/2018 - 05/2020

08/2013 - 05/2017

04/2019 - 09/2019

09/2017 - 09/2018

Software Engineer Intern

Tech Used: Java, Spring, Elasticsearch, Angular 2

- \mapsto Developed internal web application to improve user experience
- → Developed a REST API to allow front-end consumption of data

Lenovo Group Ltd.

05/2015 - 12/2015

Software Development Intern

Tech Used: Java, SAS Analytics

- → Developed web crawler to download consumer data from retail site
- → Labeled Spanish consumer data for binary classification

PROJECTS

Semantic Parsing with Encoder-Decoder Model

- → Developed seq2seq model for translating a Geoquery dataset (Zelle and Mooney, 1996) into Prolog formulas
- → The model consists of bidirectional LSTM encoder-decoder with bilinear attention and scheduled sampling, achieving 79% token-level accuracy and 62% denotation match

Teaching an Agent to Drive a Racecar with Imitation Learning

- → Implemented convolutional deep neural network to complete a racing lap
- → Extended imitation learning by incorporating Dataset Aggregation method

Clinically Accurate Report Generation from Chest X-Ray Images

- \mapsto Implemented Adaptive Attention and Hierarchical LSTMs to generate coherent medical reports
- → Implemented Self Critical Sequence Training to reduce exposure bias and improve clinical accuracy

SKILLS

Languages Python, Java, Go, C++, Rust, C#

Tools Vim, Git, Travis CI, Splunk

Clouds Google Cloud Platform, Amazon Web Services

Frameworks Pytorch