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Jeremy Irvin

jirvin16.github.io https://github.com/jirvin16 https://www.linkedin.com/in/jirvin16

Education

Stanford, M.S. Computer Science, 4.00/4.00 GPA

Sep 2016 - June 2018

Artificial Intelligence Track

UC Santa Barbara, B.S. Computer Science and B.S. Mathematics, 3.97/4.00 GPA
College of Creative Studies (CCS)

Accelerated B.S. Program - "A Graduate School for Undergraduates"

• Regents Scholar, ranked top of class (Nineteen A+ grades in core classes)

Experience

Software Engineer Intern, Microsoft

Summer 2017

Bing Predicts

Software Engineer Intern, Microsoft

Summer 2016

Bing Predicts

- Created a model to predict the MTV Video Music Awards's using Bing search and social data
- Wrote Python for scraping, feature engineering, model testing, and MART Gradient Boosting training
- Additionally implemented LSTM's for time series forecasting using Keras and CNTK

Software Engineer Intern, Microsoft

Summer 2015

Satori (Knowledge Graph) Within Bing

- Developed an algorithm to detect subtle entity relations in an immense ontology and rank them by novelty
- Wrote C# and internal query language as part of an R&D ML pipeline
- Increased run-time by two orders of magnitude, allowing for efficient discovery of the relations

Projects and Research

Recurrent Neural Networks with Attention for Genre Classification

Fall 2016

- Implemented RNN's and LSTM's for automatic genre classification of songs using audio spectrograms
- All code written in Python using TensorFlow
- Achieved results comparable to state-of-the-art using hand-crafted features

Research Assistant, Stanford

September 2016 -

Deep Learning Bootcamp with Professor Andrew Ng

- Selective quarter-long course to develop expertise and publish in deep learning
- Implemented NMT with Attention, Variational Autoencoder, and Zero Shot Translation in TensorFlow

Research Assistant, UCSB

September 2015 - June 2016

 ${\it Undergraduate \ Senior \ Thesis \ with \ Professor \ Moscoso}$

- Applying dynamical systems and causal modeling techniques to linguistic data (using Python and R) to understand the underlying complex nonlinear patterns of language development in children
- First author paper accepted by Cognitive Science and second author paper submitted to ACL
- UCSB Undergrad Research Colloquium Best Humanities Research Prize Winner

Teaching

Co-lecturer, UCSB

Winter 2016

- Co-taught a course on ML, NLP, and Deep Learning
- Created over 250 lecture slides
- http://computer-learning.github.io/class/

Skills

- Languages: Python, C, R, C#, C++
- Mastery of Python (5 years of daily coding experience), Expert in C (4 years)
- Expert with TensorFlow and scikit-learn, familiar with Keras and CNTK
- Experience with web crawling using Scrapy and Selenium
- Proficient with SQL and MySQL, especially experienced with relational databases
- Copious experience with source control using Git

References

Dr. Yuqing Gao

Microsoft Distinguished Engineer yuga@microsoft.com

Dr. Maribel Bueno UCSB Professor, Head of CCS Mathematics (805) 893-5245 mbueno@math.ucsb.edu