

Daniel Sedra

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EDUCATION

CORNELL UNIVERSITY

MS IN COMPUTER SCIENCE

Adviser: Kilian Weinberger
May 2016 | Ithaca, NY

CARNEGIE MELLON UNIV.

BS IN COMPUTER SCIENCE

Adviser: William Cohen
May 2014 | Pittsburgh, PA

COURSEWORK

GRADUATE

Graduate Algorithms
Statistical Learning Theory
Matrix Computations
Deep Learning
Crowdsourcing
Algorithms for NLP

UNDERGRADUATE

Machine Learning
Large Data Machine Learning
Natural Language Processing
Functional Programming
Combinatorics
Computer Networks
Algorithms

AWARDS

Alumni Award for Undergraduate
Excellence
College Honors
University Honors
ECE Feigen Scholarship

SKILLS

Proficient

Python • Lua • Matlab • Meteor
MongoDB • Pandas • Numpy •
Scikit-learn • \LaTeX

Familiar:

C • Java • SML • HTML • CSS •
Tensorflow

EXPERIENCE

MICROSOFT | APPLIED SCIENTIST IN BINGADS

Aug 2016 – Sept 2017 | Bellevue, WA

- Constructed a pipeline for ranking images against keywords using deep embeddings.
- Used autoregressive techniques for root cause analysis on multivariate performance indicators for rapid issue response.

CORNELL UNIVERSITY | TEACHING ASSISTANT

Aug 2014 – May 2016 | Ithaca, NY

- Taught CS1110, CS2110, CS4780, and CS6780 ranging from introductory programming to graduate level machine learning.
- Designed homework assignments and exams, held office hours, and graded.
- Coordinated course staff and led review sessions.

GEORGIA TECH | DATA SCIENCE FOR SOCIAL GOOD FELLOW

May 2014 – Aug 2014 | Atlanta, GA

- Worked on a team that analyzed WiFi data from the Georgia Tech campus.
- Developed algorithms for estimating room occupancy from router information.
- Presented work at the 2014 TUN conference in Nashville, TN.

YAHOO | MOBILE QUALITY ENGINEERING INTERN

May 2013 – Aug 2013 | Sunnyvale, CA

- Applied machine learning for sentiment analysis of short user reviews of Yahoo! apps.
- Developed a pipeline for scoring and ranking reviews by polarity.

RESEARCH

WEINBERGER LAB | AUG 2015-MAY 2016

Worked on deep learning projects for image classification and contributed to the development of a new stochastic training method for deep residual networks. Other projects included sonification of color, network compression, and stochastic batch normalization.

GRAPHICS LAB | MARCH 2016 - MAY 2016

Worked with Professors Kavita Bala and Haym Hirsh to develop a collaborative image annotation technique that relied on disjoint cliques of people to label materials in indoor scenes.

UNDERGRADUATE RESEARCH | AUG 2013 - MAY 2014

Worked with Professor William Cohen on graph based approaches to semantic similarity between strings using the Wikipedia hypergraph.

PUBLICATIONS

- [1] Huang, G., Sun, Y., Liu, Z., Sedra, D., and Weinberger, K. Deep Networks With Stochastic Depth. In the *European Conference on Computer Vision*, 2016.
- [2] Upchurch, P., Sedra, D., Mullen, A., Bala, K., Hirsh, H. Interactive Consensus Agreement Games for Image Labeling. In the *Fourth AAAI Conference on Human Computation and Crowdsourcing*, 2016.