

# Daniel SEDRA

## PERSONAL DATA

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ADDRESS: Bellevue, WA  
EMAIL: dmsedra at gmail dot com  
WEBSITE: www.dmsedra.com

## EDUCATION

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- MAY 2016 Master of Science in COMPUTER SCIENCE, **Cornell University**  
Thesis: "New Training Paradigms for Deep Residual Networks"  
Adviser: Professor Kilian Weinberger  
GPA: 3.72/4.0
- MAY 2014 Bachelor of Science in COMPUTER SCIENCE, **Carnegie Mellon University**  
Thesis: "New Approaches for Calculating Semantic Relations"  
Adviser: Professor William Cohen  
Alumni Award for Undergraduate Excellence  
College and University Honors  
GPA: 3.64/4.0

## WORK EXPERIENCE

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| Aug '16-Sept '17 | Applied Scientist at Microsoft<br><i>BingAds</i> <ul style="list-style-type: none"><li>• Constructed a pipeline for ranking images against keywords using deep embeddings.</li><li>• Performed model and feature selection to improve performance on the click prediction task.</li><li>• Used autoregressive techniques for root cause analysis on multivariate performance indicators for rapid issue response.</li></ul> |
| AUG '14-MAY '16  | Cornell University<br><i>Teaching Assistant</i> <ul style="list-style-type: none"><li>• Taught CS1110, CS2110, CS4780, and CS6780 ranging from introductory programming to graduate level machine learning.</li><li>• Designed homework assignments and exams, held office hours, and graded.</li><li>• Coordinated course staff and led review sessions.</li></ul>   |
| MAY '14-AUG '14  | Georgia Institute of Technology<br><i>Data Science for Social Good</i> <ul style="list-style-type: none"><li>• Worked on a team that analyzed WiFi data from the Georgia Tech campus.</li><li>• Developed algorithms for estimating room occupancy from router information.</li></ul>   |

- Presented work at the 2014 TUN conference in Nashville, TN.

MAY-AUG 2013

Yahoo  
*Quality Engineering Intern*

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

## PUBLICATIONS

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1. Huang, G., Sun, Y., Liu, Z., **Sedra, D.**, Weinberger, K. Deep Networks With Stochastic Depth. In *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.

## PROFESSIONAL SERVICE

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Reviewer for Computers and Electrical Engineering

## AWARDS & SCHOLARSHIPS

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

## SELECTED COURSES

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Cornell Graduate Algorithms †  
Statistical Learning Theory †  
Matrix Computations †  
Deep Learning †  
Crowdsourcing †

CMU Algorithms  
Machine Learning  
Natural Language Processing (NLP) †  
Machine Learning for Large Datasets †  
Combinatorics  
Machine Learning Theory †  
Algorithms for NLP †

† = graduate

## LANGUAGES

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ENGLISH: Native  
ARABIC: Basic Knowledge

## COMPUTER SKILLS

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Python: PANDAS, SCIKIT-LEARN, NUMPY, MATPLOTLIB, THEANO  
Lua: TORCH  
Misc: JAVA, METEOR, HTML, MONGODB  
OS: LINUX, MAC OS