Eddie Cheung

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About me

- Finishing PhD in **machine learning**
- Research in **optimization algorithms**
- Experience in **scalable solutions** and **large data**
- Knowledgeable about many ML tasks

Education

2013- 2018	**PhD** *University of Waterloo*, Waterloo, ON.	
	Department of Computer Science (Expected grad. April 2018)	
2007–2012	**BMath** *University of Waterloo*, Waterloo, ON.	
	Department of Combinatorics and Optimization	

Work Experience

2012–2013 Software Developer *PureFacts Financial Solutions*, Toronto.
Improved the automation pipeline (SQL, C#, Python) for client-side processes.

2010 Defence Research Student *Department of National Defence*, Ottawa.
Researched optimization algorithms (Matlab) to solve large multi-objective mixed integer programs.

2010 Imaging Research Student *Sunnybrook Health Sciences Centre*, Toronto.
Implemented a parallel (CUDA) image reconstruction algorithm, 27x speedup.

Selected Publications

[1] **Cheung, E. Y.** and Li, Y. "Nonsmooth Frank-Wolfe using Uniform Affine Approximations." arXiv preprint arXiv:1710.05776 (2017).

[2] **Cheung, E. Y.** and Li, Y. "Projection Free Rank-Drop Steps." *2017 International Joint Conference on Artificial Intelligence (IJCAI)*.

For a complete list, see `https://scholar.google.ca/citations?user=360a1vkAAAAJ&hl=en`.

Projects

- **Movie Recommendations**: Find suggested movies based on similar people using [1]. (Matlab)

- **Social Graph Suggestion**: Identify missing links in a social graph using [2]. (Matlab)

- **Sudoku Solver**: Basic solver. The canonical start to learning AI. (C++)

- **Go AI**: Very rudimentary (pre-AlphaGo) Go AI using genetic algorithms for pruning. (Python)

- **IPO Price Swings** - Scraped tweets and news articles to try to predict whether the IPO price is over or under priced based on sentiment analysis (Python)