Ryan Jiang

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Experience

- **Petuum** Pittsburgh, PA
  Software Engineering Intern *May - August 2018*
  - Implemented distributed GraphQL message-broker with Node and Redis cluster
  - Scaled distributed ML platform and sped up client and dev access, by enabling PetuumOS instances to run on cluster partitions instead of requiring whole clusters
  - Developed data visualization UI module with 5x speed up using cache hierarchy optimization

- **Lokafy** Toronto,ON
  Software Development Intern *June - August 2016*
  - Rewrite front-end with Angular
  - Implemented RESTful APIs with Django/Python and MySQL

Skills

Proficient: C/C++(CUDA), Python (Tensorflow), Go
Familiar: Docker, Node js, Spark/Hadoop, Kubernetes

Projects

Cassiopeia : *Go, Distributed Systems*
https://github.com/Ryan-Qiyu-Jiang/cassiopeia
- Distributed hash-table based off Cassandra, with pieces of Kademlia and other systems
- Tunable consistency, fault-tolerant, elastic

Strata Distributed Collaborative-Filtering: *Python, Spark*
https://github.com/Ryan-Qiyu-Jiang/strata_dsmf
- Distributed matrix factorization using strata optimization inspired by IBM paper
- 70% faster than iterative parameter-mixing on three nodes over movielens dataset

Marmalade : *ES6, Algorithms*
https://github.com/Ryan-Qiyu-Jiang/marmalade
- Chess AI chrome extension
- Minimax with alpha-beta pruning and progressive deepening optimizations

X-Box : *ES6, AI*
https://github.com/Ryan-Qiyu-Jiang/x-box http://x-box.netlify.com/#/?_k=kig542
- Casey obeys commands and answers questions about her own behaviour
- Expert-system goal tree transversal to answer text questions

Education

University of Waterloo *2017- May 2022*
Candidate for Bachelor of Computer Science, GPA 3.8

Achievements

Open Source Contributor : *Tensorflow, Keras* *Python*
Canadian Computing Olympiads (2017) : *C++* *CCO bronze, CCC Top 20*
National coding competition. Solved problems with algos like longest path, set-cover, and dp.