Jacob Jackson
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Experience

- **OpenAI** — Intern *Sep 17, 2018 – Dec 2018*
  - Research in semi-supervised learning
- **Jane Street Capital** — Software Development Intern *Feb 2018 – Apr 2018*
  - Designed software providing an easy way for other developers to create interactive user interfaces
- **Hudson River Trading** — Wintern *Jan 1 – Jan 19, 2018*
  - Applied low-level optimizations to create a performant order book representation in C++
  - Used simple statistical models to extract predictive signals from market data
- **Petuum** — Software Engineering Intern *Summer 2017*
  - A poster based on this work was accepted to SysML 2018 [`www.sysml.cc`]
    - Poster [`jacobj.ca/hdbscan.pdf`]
    - Article [`sysml.cc/doc/105.pdf`]
  - Designed and implemented an approximate clustering algorithm in a distributed memory environment
- **MemSQL** — Software Engineering Intern *Fall 2016*

Education

- University of Waterloo *2015 – Aug 2019*
  - Double major in Computer Science and Combinatorics & Optimization
  - Minor in Pure Mathematics
  - Recipient of the Michael and Ophelia Lazaridis Olympiad Scholarship, which covers all school expenses (approx. $115,000 value)
  - 90% faculty average

Achievements

- North American champions, ACM-ICPC World Finals, United States (2017)
- Bronze medal, ACM-ICPC World Finals, Thailand (2016)
- Gold medal, International Olympiad in Informatics, Kazakhstan (2015)
- Gold medal, International Olympiad in Informatics, Taiwan (2014)
- Top 5% (207th place), Putnam Competition (2017)
- Second place, MIT Battlecode (2017)

Skills

C++ (approx. 30k lines), Rust (approx. 10k lines), Python (pandas, NumPy, TensorFlow, PyTorch), toast making, numerous other programming languages

Hobbies

- Algorithm competitions at Codeforces [`codeforces.com/profile/zxqfl`] and TopCoder [`topcoder.com/members/zxqfl`]
- Working on personal projects [`github.com/zxqfl`]
  - TabNine [`tabnine.com`], which uses machine learning for language-agnostic, low-latency code autocompletion
  - jellies [`github.com/zxqfl/jellies`], a simple and challenging puzzle game
  - Sashimi [`github.com/zxqfl/sashimi`], a chess engine which uses Monte Carlo Tree Search
- Playing Go