

Jeffrey Liu

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EDUCATION

University of Waterloo Sep. 2018 – Apr. 2022 (Expected)
B. Math, Computer Science and Combinatorics & Optimization Double Major, Statistics Minor
+ 4.0 Major GPA (97.5% Major Average, Dean's Honour List)

WORK EXPERIENCE

Wish (ContextLogic Inc) *San Francisco, CA*
Full Stack Software Engineer Intern • Python, SQL, ReactJS, MongoDB May – Aug. 2019
+ Part of the merchant payments team, which handles payment of billions of dollars annually
+ Created a dashboard and RESTful API to automatically detect, diagnose and fix disbursement issues, helped resolve millions of dollars' worth of underpayments/overpayments
+ Researched and experimented novel ways to detect refund fraud attempts, leveraged statistical modeling and machine learning to test hypotheses in production data

PROJECTS

Euclidean Geometry Automatic Theorem Prover • Scala, Java, Spring
+ Designed an engine which automatically solves proof-based and computational Olympiad-level geometry problems
+ Executes depth-first search with template matching schemes and first-order predicate logic
+ Utilized multithreading to increase performance

Autonomous Mine Sweeper • C++
+ Programmed Arduinos to control three omnidirectional wheels
+ Created inductor-based metal detector, ultrasound-based positioning system, and electrical circuitry for the detection and retrieval of metal discs
+ Engineered a wooden vehicle base; soldered circuitry, custom PCBs, motors

ACHIEVEMENTS

+ **Canadian Computing Olympiad 1x Silver, 1x Bronze**
(placed 13th and 15th nationally)
+ **Asian Pacific Mathematical Olympiad 2x Qualifier**
(invited as one of the top 20 Canadian high school students in the COMC)
+ **Canadian Mathematical Olympiad 2x Qualifier**
(placed 12th and 19th nationally)
+ **United States of America Mathematical Olympiad Qualifier**
(invited as one of 242 students out of over 120k AMC participants)
+ **Euclid Mathematics Contest 2018 plaque winner**
(3rd overall, 1st in grade 12 nationwide out of 18.4k participants)
+ **CIBC National Scholarship**
(rewarded annually to the top student entering the University of Waterloo Faculty of Math)
+ **Citi Canada Scholarship**