Andrew Luo

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Experience

Noom   Jan 2022 - Apr 2022
Full-Stack Software Developer Intern   *New York City, NY*
- Planned, designed, and implemented a Natural Language Processing microservice for directing customer service and coaching requests using AWS and the Apache OpenNLP library.
- Monitored experimental branch via A/B testing to deduce a 15% improvement in question detection and triage and a 5% average increase in long term user engagement.

BDO   Sept 2020 - Dec 2020
Full-Stack Microsoft Developer Intern   *Missisauga, ON*
- Developed an intuitive scheduling application in Angular for the company's internal resource management tool.
- Integrated web application with all parts of the business logic using C# with .NET and Microsoft SQL Server.
- Saw through the entire development lifecycle of the project, from communicating expectations with business managers and making licensing decisions to handling maintenance and feature requests.

Wayfair   Jan 2020 - Mar 2020
Backend Developer Intern   *Boston, MA*
- Made design architecture decisions for the internal customer service tool.
- Implemented backend business logic using PHP and Microsoft SQL Server, ensuring correctness by creating extensive unit and integration tests covering all cases of the business logic.

Wish   May 2019 - Aug 2019
Full-Stack Software Developer Intern   *San Francisco, CA*
- Used Python and SQL to monitor merchant fraud lifecycle including fines, warnings, and refunds.
- Contributed to refund fraud investigations which saved the company $40,000 in refund costs per week.

Education

University of Waterloo   Expected April 2025
Master of Mathematics in Computer Science   *Waterloo, ON*
- Conducting research on computer algebra algorithms by applying and citing relevant areas of research in mathematics and symbolic computation.

University of Waterloo   Sept 2018 - Apr 2023
Bachelor of Mathematics   *Waterloo, ON*
- Triple Majors in Computer Science, Pure Mathematics, and Combinatorics and Optimization.
- Graduated with Dean's Honour Roll standing and a 95% major average.
- **Relevant Courses:** Object Oriented Programming, Data Structures, Algorithm Design and Analysis, Machine Learning, Computational Mathematics, Numerical Optimization, and Linear Programming.

Projects

SAGE ACSV | *Python, SageMath*
- Collaborated with mathematicians and computer scientists from different institutions on the development of a computer algebra package for computing asymptotic behaviours of multivariate rational generating functions.
- Revised and published as a PyPi package with a conference proceeding paper.

Personal Website | *Angular, Typescript*
- Developed from scratch and hosted on turnip314.com.

Technical Skills

Languages: Python, C++, C, Java, PHP, C#, SQL, JavaScript, Scala, HTML, CSS, Kotlin
Tools and Technologies: MongoDB, Microsoft SQL Server, Angular, Git, Visual Studio, JetBrains

Achievements

NSERC Scholarship: Two-time recipient of prestigious $6000 undergraduate research award.
Putnam Math Contest: Ranked top 10 percentile of all North American contestants.