# Alexander W. Lee

Curriculum Vitae

mail@alexanderwlee.com
https://alexanderwlee.com

## Education

2018–2022 — Amherst College
B.A. in Computer Science and Mathematics, *summa cum laude*
Thesis: DIFFUSR*: Distortion-Free Swap-Randomization for Statistically-Testing Data Mining Results*
Advisor: Matteo Riondato

## Publications

All publications are available from https://alexanderwlee.com/publications

2023 — Maryam Abuissa, **Alexander Lee**, and Matteo Riondato. ROHAN: Row-order agnostic null models for statistically-sound knowledge discovery. *Data Mining and Knowledge Discovery*, 37(4):16921718

2022 — **Alexander Lee**, Stefan Walzer-Goldfeld, Shukry Zablah, and Matteo Riondato. A scalable parallel algorithm for balanced sampling (student abstract). In *Proceedings of the AAAI Conference on Artificial Intelligence*, volume 36, pages 12991–12992

## Honors and Awards

2024 — NSF Graduate Research Fellowship, National Science Foundation
*National research fellowship for outstanding STEM graduate students*

2022 — The Computer Science Prize, Amherst College
*Top student in computer science, based on honors thesis and overall achievement*

2022 — Phi Beta Kappa, Amherst College
*National honor society*

## Industry Experience

2022–2024 — Software Engineer, Microsoft Corporation
*Developed product catalog services that power the company's commerce platforms*

Summer '21 — Software Engineer Intern, Microsoft Corporation
*Built diagnostic tooling to debug issues in the business's product catalog services*

Summer '20 — Software Engineer Intern, Fidelity Investments
*Created call routing and productivity software for the company's contact centers*

Summer '19 — Software Engineer Intern, Health Sqyre
*Refined the payment microservice for the startup's medical supplies marketplace*

## Presentations

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| 2023 | Maryam Abuissa and **Alexander Lee**. ROHAN: Row-order agnostic null models for statistically-sound knowledge discovery. ECML PKDD Plenary Session for the Best Journal Track Papers |
| 2022 | **Alexander Lee** and Stefan Walzer-Goldfeld. A scalable parallel algorithm for balanced sampling. AAAI Student Abstract and Poster Program |

## Teaching Experience

### Teaching Assistant

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| 2023–2024 | AP CS Principles, Francis Marion School (Microsoft TEALS Program) |
| Fall '20 | COSC 111: Introduction to Computer Science I, Amherst College |
| Fall '19 | COSC 112: Introduction to Computer Science II, Amherst College |

### Peer Tutor

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| Spring '20 | COSC 211: Data Structures, Amherst College |
| Spring '19 | COSC 111: Introduction to Computer Science I, Amherst College |

## Leadership Experience

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| Spring '22 | Tech Peer Mentor, Amherst College Center for International Student Engagement<br>*Mentored a cohort of six international students interested in pursuing careers in tech* |
| Fall '20, Spring '21 | President, Amherst College Association for Computer Machinery Student Chapter<br>*Led alumni panels, interview prep sessions, and software engineering crash courses* |

## Undergraduate Coursework

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| Computer Science | Data Mining, Machine Learning, Artificial Intelligence, Evolutionary Computation, Distributed Algorithms, Parallel and Distributed Computing, Computer Security, Networks, Computer Architecture, Computer Systems, Algorithms, Data Structures, Introduction to Computer Science II, Introduction to Computer Science I |
| Mathematics | Probability, Real Analysis, Abstract Algebra, Linear Algebra, Discrete Mathematics, Multivariate Calculus, Intermediate Calculus, Introduction to Statistical Modeling |

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