

Seungheon Oh

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EDUCATION

Texas A&M University [Math BS Honors]

August 2023 - Summer 2025

GPA: 3.8

Calculus I-III, Differential Equations, Linear Algebra, Real Analysis, Analysis on Metric Space, Cryptography, Abstract Algebra, Mathematical Probabilistics, Financial Mathematics, Algorithms and Data Structures

WORK EXPERIENCE

MLabs - Intern (2022 April ~ 2022 June)

MLabs [<https://mlabs.city>] **Full Time Engineer** (2022 June ~ Present)

- **Liquid-Labs, Developer** [<https://github.com/Liquid-Labs>] (2022 June ~ Present)
 - Contributed and maintained various libraries used in blockchain projects and testing.
 - Researched and built property testing frameworks for Plutarch, a domain specific language for on-chain scripts.
 - Maintained and serviced de-fi [protocol of TVL +\\$100M at peak, 3rd in Cardano](#)
- **Plutarch eDSL, Maintainer** [<https://github.com/Plutonomicon/plutarch-plutus>] (2024 Jan ~ Present)
 - Maintained Plutarch-Plutus eDSL, a Haskell-based eDSL for development of Cardano on-chain smart contracts.
 - Introduced new optimization strategies for various performance critical applications of Plutarch.
 - Revise and expand documentation that covers optimization details of the compilation target.
 - Draft proposals and successfully fund additional development of Plutarch through Cardano Catalyst.
- **Pisa Fees, Project Manager** [<https://milestones.projectcatalyst.io/projects/1200157>] (2024 Aug ~ Present)
 - Initialized Cardano Catalyst project for funding of the project: from budgeting to technical outlines.
 - Drafted specification for the decentralized exchange specialized to cover transaction fees in foreign tokens.
 - Managed developer and budget allocation, high level project design, and code quality control.
- **MLabs Core Tools, Maintainer** [<https://github.com/mlabs-haskell>] (2023 Nov ~ Present)
 - Developed shared utilities for common use between various projects at MLabs.
 - Surveyed developer experiences and proposed solutions for better efficiency and ergonomics.
 - Provided internal technical support for maintaining project build reproducibility through Nix and Hercules CI.
- **Consensus 2024, ZuriHac 2022, ZuriHac 2024, Rare Evo 2024, Cardano Summit Dubai**
 - Participated in conferences for business development as part of the MLabs team.
 - Joined offline events for connection building on functional programming, blockchain, and finance industry.

EXTRACURRICULAR ACTIVITIES

TAMU Math Club (2023 ~ present)

- Participated in events that advocate math education, learn research topics, and local competitions.
- **Joint Mathematics Meeting 2025, Undergraduate Presenter (Jan 2025)**
 - Presented about integration of Lambda Calculus into Haskell as EDSL with strong type assurances.

TAMU Blockchain Club - Officer(2023 ~ present)

- **Dallas National Blockchain Summit** (November 2023)
- Served as an executive member hosting events and leading developer cohort for smart contract newcomers.

HONORS AND AWARDS

Texas A&M University Art & Science department Dean's Honor Roll (2023, 2024)

Sheila and Robert Templeton Endowed Scholarship (2024)

SKILLS

Korean (Fluent/Native), English (Fluent)

System Management & Continuous Integration on Linux systems (Mostly Hercules-CI for Nix) (Proficient)

Database Development/Management (Mainly PSQL)

Functional Programming - Haskell, Nix, Ocaml, Category Theory, Type Level Programming

Compiler Designing, Programming Language Designing

Formal Verification - Agda, Lean, Coq (Basic)