

THOMAS HOANG

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EDUCATIONAL BACKGROUND

Denison University, Granville, OH

Expected Graduation: May 2025

Bachelor of Sciences, Computer Science, and Mathematics

Denison Alumni Award (2021), Anderson Science Scholar Award (2022), Crown Fellowship Award (2023).

TECHNICAL PROFICIENCIES

- Programming Languages: C/C++ | C# | Python | SQL | R | Javascript.
- Database: SQL Server | Azure SQL.
- Mathematics and Algorithms: Non-linear Algorithms | Data Structures And Algorithms.
- Others: ASP MVC | .NET framework | Fluent API | LINQ method | Design Pattern | Unit Test skills | Low-Code Outsystems.

WORK AND RESEARCH EXPERIENCES

Research Intern

May 2024 - August 2024

Climate Change Health Intelligence lab, Nashville, Tennessee

- Created and implemented BERT-based and LDA models for analyzing over 400,000 tweets during Hurricane Harvey, improving data analysis and machine learning processes. ([*NLP, LDA Topic Modeling, BERT model*](#))
- Authored firstly a paper in the Q1 journal, demonstrating expertise in AI/ML and mathematics, and contributing to disaster impact analysis. ([*Knowledge Graph, GNN*](#))
- Reviewed submissions for the ACM International Conference on Information and Knowledge Management (CIKM), ensuring the quality and rigor of research papers presented at conference. ([*Research on information management*](#))

Data Engineer Intern

May 2023 - August 2023

(Costco Wholesale) FPT Americas, Richardson, Texas, United States

- Implemented data manipulation operations, including joins, sub-queries, aggregations, and stored procedures, contributing to improved data processing and analysis. ([*SQL Server*](#))
- Organized and processed large volumes of data, ensuring data quality, security, and compliance. ([*Azure Synapse Analytics*](#))

Anderson Undergraduate Researcher

May 2022 - August 2022

Denison University "Non-linear Indistinguishability Query"

- Designed multi-criteria decision-making algorithms to narrow down a large database of over a million items to select a few optimal items. ([*Database Query Processing Algorithms*](#))
- Generalized query processing algorithm to a broad set of three functions, including convex, concave, and CES.
- Approximated user's utility functions to a reasonable degree of precision, nearly zero, using artificial tuples with provable bounds. ([*Polynomials, Exponential, Logarithmic Functions*](#))
- Achieved nearly zero errors by asking more questions on interactive phases for novel query processing algorithms. ([*C++, Python*](#))

Research Assistant

May 2020 - May 2021

The University of Tartu, Tartu, Estonia

- Conducted research on the "Subordinate And Supervisor Relationship Through the Lens of Guanxi: First Empirical Research in Vietnam" paper, supervised by Dr. Quan Hoang Nguyen Tran. ([*Economics and Business Administration*](#))
- Fulfilled 100% KPIs with quality and quantity of collecting data from different types of employment, including C-levels, managers, and employees, and making judgments in analysis. ([*Leadership, Teamwork, Communication*](#))

Software Engineer Intern

October 2020 - March 2021

(FVille), FPT Software, Hanoi, Vietnam

- Coded both on the Front-end and Back-end of the Projects. ([*.NET Framework, C#, OOP, Javascript, HTML5, CSS3, Bootstrap*](#))
- Designed one complete website with a database and APIs among layers, satisfying integration model, security, and repository design pattern. ([*Fluent API, Design Pattern, unit test, SQL Server*](#))
- Developed one web-based application followed by web service and layered architecture based on MVC. ([*ASP. NET MVC*](#))

EXTRA CURRICULAR ACTIVITIES

Boxing: Train privately with WBA champion, Truong Dinh Hoang as advisor and coaches.

Chess: Attain over 3900 games with ELO, ranking about 2100 of classic styles, ranked about 400th/14500 players.