

Daniel Öman

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Education

GEORGIA INSTITUTE OF TECHNOLOGY

2021 – 2025 (expected)

B.S. Computer Science, concentrations in Intelligence and Theory | 4.0/4.0 GPA

ATLANTA INTERNATIONAL SCHOOL

2017 – 2021

Valedictorian | 4.53/4.0 GPA | 45/45 points on International Baccalaureate exam, top 1% of global candidates awarded

Experience

GOOGLE

Incoming Software Engineering STEP Intern

Starting May 2023

GEORGIA TECH COLLEGE OF COMPUTING

Atlanta, GA

Undergraduate Teaching Assistant (Homework Lead)

August 2022 – Present

- Overseeing the development and grading of homework assignments for ~700 students as TA Homework Lead for CS 1331: Intro to Object Oriented Programming under Prof. Richard Landry and Dr. Aibek Musaeu
- Leading weekly recitations for ~50 students and helping students with problem solving and code debugging during one-on-one office hours
- Grading exams and writing auto-grader unit tests for assignments using the Java Reflection library

ERMI

Atlanta, GA

Engineering Intern

July – August 2021

- Analyzed data and created decision trees from health insurance claims data from 1k+ knee surgery patients using R
- Identified highest cost patients to target for non-surgical intervention

Engineering Intern

July – August 2019

- Analyzed data from a robot that diagnoses knee injuries
- Learned and used R to organize and plot datasets to assess and visualize the reliability and accuracy of the robot
- Analysis to be incorporated into research papers

GEORGIA TECH RESEARCH INSTITUTE

Atlanta, GA

Engineering Intern

June – July 2020

- Worked in a team of 4 to develop an app that creates a Bluetooth mesh network for emergency communication
- Implemented routing algorithms in Python and Java and ran simulations of the app to investigate network properties and stability

Leadership and Involvement

GEORGIA TECH FINANCIAL SERVICES AND INNOVATION LAB

Atlanta, GA

Undergraduate Research Assistant

January 2023 – Present

- Developing and applying natural language processing models to predict trends in financial markets under Dr. Sudheer Chava

CONSULT YOUR COMMUNITY

Atlanta, GA

Business Analyst

August – December 2022

- Conducted market research for a local sauce company to solidify the client's target audience and revamp social media strategy
- Aggregated and plotted 10k datapoints of consumer data to determine best product pairings for the next sauce product launch
- Drafted social media and search engine optimization strategy report to be used by the client in the following calendar year

Example Projects

Ruter-Sju Card Game Bot and Monte Carlo Simulation (Personal Project)

December 2021 – November 2022

- Designed and implemented algorithms in Python to play card game Ruter-Sju to investigate best game strategy
- Built a Monte Carlo simulation with 20k+ games and used Pandas and PyPlot libraries to analyze and visualize game data

International Soccer Analytics (GA Tech CS 2316 Final Project)

January – April 2022

- Analyzed what makes a professional soccer team successful across the top five European leagues
- Web-scraped and aggregated over 190k datapoints from websites and databases and created diverse visualizations in Python

Mathematics Library (Personal Project)

August – December 2021

- Implemented many mathematics algorithms in Python from scratch to solve tedious computational problems
- Algorithms include converting a matrix to reduced row echelon form, inverting a matrix, decimal-fraction converter walking the Stern-Brocot tree to a given error, polynomial multiplication, and various numerical integration methods

Skills

Technologies: Python (Including Pandas, NumPy, Beautiful Soup), Java (Including JavaFX), LaTeX, MySQL, R, Git

Relevant Coursework: Data Structures and Algorithms, Linear Algebra, Multivariable Calculus, Discrete Mathematics

Languages: Fluent in Spanish, Swedish, English

Affiliations: Delta Chi Fraternity (Scholarship Chair), Society of Hispanic Professional Engineers, Consult Your Community