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 *August 2022 – Present*
- Collaborating with professor and other teaching assistants to teach Java object-oriented-programming concepts to ~30 students during weekly recitations
- Grading exams and homework, writing homework assignments, and writing auto-graded unit tests in Java for ~700 students
- Helping students with problem solving and code debugging during weekly one-on-one office hours

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 multiplictation, 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