Alexander Hutman

alexhutman.com | linkedin.com/in/alexhutman/
Message for email/telephone number

EDUCATION

QUINNIPIAC UNIVERSITY

BS in Computer Science
BA in Mathematics
May 2019 | Hamden, CT
College of Engineering
Magna Cum Laude
Cum. GPA: 3.87 / 4.0
Major GPA: 3.95 / 4.0 (CS)
3.85 / 4.0 (Math)

LINKS

Github:// **alexhutman**
LinkedIn:// **alexhutman**
YouTube: **MathTutorials**
Quora:// **Alex-Hutman-1**
StackOverflow:// **6708303**

COURSEWORK

COMPUTER SCIENCE

Algorithm Design & Analysis
Computer Architecture & Organization
Cryptography
Cyber Security
Data Mining
Data Structures & Abstraction
Intelligent Systems
Introduction to Software Development
Networking & Distributed Processing
Operating Systems & Programming
Parallel & Distributed Computing
Theory of Computation
iOS Programming

MATHEMATICS

Abstract Algebra
Advanced Calculus
Introdution to Discrete Mathematics
Linear Algebra
Multivariable Calculus
Number Theory
Ordinary Differential Equations

SKILLS

PROGRAMMING

Experienced:
Python • Java • Shell • T-SQL
Typescript • VBA • HTML • vim
Acquainted:
Swift • C • PHP • Cython
R • Angular • Vue • Assembly
Familiar:
C++ • Scala • Objective-C • sed

EXPERIENCE

CIGNA | Software Engineer

July 2019 - Present | Bloomfield, CT

- Worked on HIFI – an internal Python user-facing application that facilitated the transfer of DSV files into the Hadoop ecosystem and allowed users to query them using HQL.
- Improved its performance, CI/CD pipeline, and overall functionality/capability.
- Interacted with Kafka and Ceph S3; also made use of Jenkins and Ansible for deployment.

SIKORSKY AIRCRAFT | Business Analyst Intern

November 2018 – July 2019 | Stratford, CT

- Worked with customers to develop dynamic web-based applications and Excel macros tailored to their needs.
- Designed, queried, and maintained SQL databases to interact with aforementioned applications/macros.
- Created a web application for helicopter designers/engineers to consolidate data needed for calculating torque values based on different fasteners, wrench lengths, etc.

PROJECTS

AES VISUALIZER | Interactive/Informative Web App

Jan. - Feb. 2018

- **Web application** in Typescript that explains how the **Advanced Encryption Standard** works in realtime, utilizing a user-given message and key

GAUSSIAN | Interactive/Informative Web App

June 2017, March 2018

- **Web application** in JavaScript using the p5.js library that informs users how Gaussian Blurs are performed, as well as the intuition behind the algorithm.

RESEARCH

QUINNIPIAC UNIVERSITY MATH DEPARTMENT | Researcher

Fall 2016 – Present | Hamden, CT

- Wrote and optimized a program in Python-based mathematical software called SageMath that traverses a "metagraph" to efficiently calculate the zero forcing number of a desired graph.
- Will be **open-source** for others to be able to calculate similar "forcing numbers," which have applications in smart sensor networks and for uploading/downloading data in certain quantum computing design paradigms.
- A formal paper will also be written and will hopefully have use in graph theory.

AWARDS/ACCOMPLISHMENTS

2015 - 2019	Dean's List	For earning a 3.5 GPA or greater
2015 - 2019	Dean's Scholarship	"For academic excellence"
2015 - 2019	Lee Company Scholarship	"For being an outstanding student"
2019	Outstanding Achievement in CS	Decided on by faculty
2019	Quinnipiac Computing Club	President