

# ELLIOTT YOON

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## Skills

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<b>Websites</b>	Github ( <a href="#">elliottyoong</a> ) — Visual Portfolio ( <a href="https://elliotts-portfolio.vercel.app">https://elliotts-portfolio.vercel.app</a> )
<b>Languages</b>	C, C++, Golang, Javascript, Java, Python, Racket, SQL, x86 Assembly
<b>Technologies</b>	AWS, Docker, Flask, Git, Heroku, Keras, React, Scikit-learn, Tensorflow
<b>Certifications</b>	Machine Learning ( <a href="#">Coursera</a> ), DS4A Honors ( <a href="#">Correlation One</a> )

## Education

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### Northwestern University

Evanston, IL (September 2021 - Expected June 2024)

#### B.A. Computer Science

- 4.00 Major/3.80 Overall GPA. [Award for Excellence in Mathematics by a First-Year Student 2022](#).
- Teaching Assistant (Fall 2022: Math 220-1 Differential Calculus, Winter 2023: CS 396 Artificial Life)  
Sound Technician & Stage Manager for [Concerts @ Bienen](#) (2021 - ) — Division III Club Ice Hockey (2021 - )
- **Relevant coursework:** Compiler Construction (current), Computer Systems, Data Structures & Algorithms, Intensive Linear Algebra and Multivariable Calculus, Intensive Real Analysis, Probability and Stochastic Processes, Programming Massively Parallel Processors with CUDA (current), Introduction to Web Development

## Experience

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### Union Home Mortgage

Strongsville, OH (May 2022 - August 2022)

#### Data Engineering Intern

- Tested and refactored dozens of existing Azure Data Lake pipelines and SQL stored procedures.
- Scripted Avro file ingestion using Python in Databricks to reduce manual pipeline work by over 80%.
- Improved 90% of reporting workflow by automating ETL data processes with SQL stored procedures.
- Saved over 100 hours of work defining table fields within database migration efforts by creating SQL functions.
- Reduced over 2 hours of daily work by creating Azure scheduled trigger pipelines that automated ingestion, deletion, and transformation tasks within Azure Data Lake, Azure Synapse Database, and Microsoft SQL Server.

### Correlation One (DS4A)

Remote (February - August 2021)

#### Data Science Fellow

- Cleaned, visualized, and analyzed data quantifying Amazon deforestation and Brazilian economic health.
- Coordinated meetings as team lead for group of 5. Reported final analysis to an audience of over 1000 people.
- Gained working proficiency in Jupyter, Numpy, Pandas, Scikit-learn, Scipy, SQL, and Tableau.

## Personal Projects

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### 2048 Racer — *HTML/CSS, Javascript, Go*

(June 2022 - August 2022)

- Built React web application that lets users race one another in the popular game 2048.
  - Implemented heuristic minimax backtracking algorithm optimized with alpha-beta pruning that successfully beats the game on its own.
  - Utilized Websockets for persistent client-server interactions, Vercel for front-end CI/CD, and Docker for composing + containerizing Nginx reverse proxy with back-end web server.

### Pineapple Pics — *HTML/CSS, Javascript, Python, SQL*

(March 2022 - June 2022)

- Developed full-stack RESTful Instagram clone built using an MVC design pattern.
  - Built REST API endpoints on a Flask web server to handle requests; automated API testing with Python.
  - Utilized React to render data from a PostgreSQL database via the Flask server REST API endpoints.
  - Authenticated users using cookies and JSON web tokens.

### C++ Games — *C++*

(March 2022)

- Built an FPS aim-training application and a Reversi clone using OOP principles and MVC design patterns.