

Matt Jacobs  
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## **Skills**

Libraries and Frameworks | Express.js, React, Node.js, Mongoose, Numpy, Keras, TensorFlow, OpenCV

Languages | HTML, CSS, JavaScript, Java, Python, C#

Database | SQL, MongoDB

Other | RESTful Routing, JSON, CRUD

## **Projects**

AI Art Generator | Full stack app for the creation and sharing of AI-generated art using arbitrary neural style transfer | <https://aiartgenerator.herokuapp.com> | React, Flask, PostgreSQL, Tensorflow, Numpy, Python, JavaScript, Cloudinary, HTML, CSS, JavaScript (04/2022)

- Integrated a pretrained neural network from tensorflow hub into a full stack app enabling users to create AI-generated art from a content and style image using arbitrary neural style transfer
- Utilized RESTful routing and full CRUD to enable users to post and share their AI-generated art with others

Social NFT | MERN stack app for the sharing and minting of NFT Artwork | <https://social-nft.netlify.app> | MongoDB, Node.js, Express.js, Mongoose, React, HTML, CSS, JavaScript, Moralis, Cloudinary, Solidity (03/2022)

- Programmed an Instagram clone centered around the sharing and posting of NFT art
- Deployed a smart contract to the Georli Ethereum testnet capable of minting NFT's
- Stored digital art and associated metadata on IPFS
- Established user authentication with JSON Web Tokens

Joke Collector | MEN stack app for collecting jokes | <https://jokes93.herokuapp.com/> | MongoDB, Node.js, Express.js, Mongoose, HTML, CSS, JavaScript (03/2022)

- Implemented RESTful routing with express servers and routers to facilitate CRUD operations for the resources "joke" and "comment"
- Rendered server-side dynamic webpages using EJS templates to render the requested resources
- Added persistence by storing resources in a MongoDB database
- Incorporated authorization using Google Oath to authenticate users

Checkers | Responsive Web Game | <http://checkersbymattjacobs.surge.sh/> | HTML, CSS, JavaScript (02/2022)

- Built an AI with three levels of difficulty using the minimax algorithm with alpha-beta pruning for increased efficiency in searching the decision tree for the optimal move
- Engineered recursive logic to solve for all valid moves a given checkers piece can make at its current position, allowing for players to select a checkers piece and see all of its valid moves
- Implemented a GUI for game initialization of players using HTML, CSS, and JavaScript, enabling human-to-human, human-to-AI, and AI-to-AI game play

## **Professional Experience**

English Teacher | Chungdahm Academy | Daegu, South Korea (08/2018)-(08/2019)

- Managed promotional events that lead to an over 20 percent increase in students at the academy
- Designed and implemented a course curriculum on a team of teachers that led to 10% increase in student retention
- Taught English as a foreign language to over 100 students and was voted teacher of the year at the academy by my students

English Teacher | Ehwa Academy | Changwon, South Korea (08/2017)-(08/2018)

- Engineered the curriculum as lead native teacher ranging from beginner to advanced
- Improved the communicative competency of over 100 students of all ages and levels of competency

English Teacher | Cambly | Fullerton, California (01/2017)-(07/2017)

- Engaged with students in online classes 1-on-1 to over 1,000 different students online
- Developed custom curriculums for regular students to optimize their learning and to better aid them in attaining their goals in learning English

Credit Analyst | Balboa Capital | Irvine, California (04/2016)-(01/2017)

- Evaluated over \$10 million in applications for equipment financing
- Partnered with managers of the company and the sales team to help improve the loan application process

Jr. Business Analyst | Go Capital | Irvine, California (07/2015)-(12/2015)

- Analyzed lease-performance data to determine which equipment leases were profitable/unprofitable
- Consulted with the CFO to update the lease packages offered to reflect the data of past and current lease profitability

## **Education**

**Master of Science Computer Science**, June 2022 DePaul University

GPA: 3.77

**Software Engineering Immersive Bootcamp**, April 2022, General Assembly

**Bachelor of Science in Managerial Economics**, June 2014 University of California, Davis

GPA: 3.85