Mark Joseph Wright

University Address
Cambridge, MA 02139

Email: mjwright@mit.edu
Phone: 817-368-9472
www.markjwright.info

Home Address
Fort Worth, TX 76123

EDUCATION

Massachusetts Institute of Technology — Cambridge, MA

Candidate for Master of Engineering in Electrical Engineering and Computer Science with a concentration in Computer Systems — Class of 2022

Bachelor of Science in Electrical Engineering and Computer Science
GPA: 4.7/5.0

Relevant Coursework includes Intelligent Multimodal User Interfaces, Performance Engineering of Software Systems, Software Studio, Elements of Software Construction, Design and Analysis of Algorithms, Artificial Intelligence, Machine Learning, Microcomputer Project Lab, and Embedded Systems

EXPERIENCE

Neocis – *Software Engineering Intern* — Summer 2021
- Designed and implemented an automated method for identification of the sinuses in CT scans of the skull

MIT – *Introduction to Machine Learning (6.036) Teaching Assistant (TA)* — Fall 2021
- Taught multiple pods of up to 12 students during labs, also proctored and graded exams
- Helped create and revise course content

MIT Research Laboratory of Electronics (RLE) – *Undergraduate Researcher* — Summer 2020
- Developed laboratories for a new freshman level electronics class
- Designed a PCB to introduce Cypress PSoC to students in an intuitive way

MIT Kavli Institute (MKI) – *Undergraduate Researcher* — Summer 2019
- Designed the framework for a pipeline to process TESS satellite images for machine learning applications
- Programmed algorithms to align, subtract, and identify potential transient stars from TESS images
- Created a web application used to classify and store a dataset of TESS images in a SQL database

Alcon – *eCommerce Intern* — Summer 2018
- Analyzed and interpreted data to achieve customer retention on the eCommerce channel
- Designed 34 unique Excel macros to allow the business to interpret customer data on an ongoing basis
- Contributed to increasing customer retention from 770 before to 902 after during the course of the internship

RELEVANT PROJECTS

Leiserchess AI Bot – *Performance Engineering of Software Systems final project (Group of 4)* — Fall 2019
- **Purpose**: to design and implement a bot that plays a game and is competitive against other bots in the class.
- Implemented parallel minimax search with alpha-beta pruning in C to achieve, redesigned the board representation to minimize space and latency, and created a web scraper to create an opening move set

Covid-19 Data Retrieval System – *Microcomputer Project Laboratory final project (Solo)* — Spring 2020
- **Purpose**: to create an easy way to obtain up to date state and country level coronavirus statistics and graphs using a command-line interface
- Designed and created using a Cypress PSoC 5 development board connected serially to a computer. Uses a basic language syntax to update a TFT screen with up-to-date statistics and display interactive graphs on the computer

Machine Learning Dataset Web Application – *during Undergraduate Researcher at MKI (Solo)* — Summer 2019
- **Purpose**: to take TESS satellite images, align and subtract them, identify potential transient stars within, and present the image to researcher with a UI to tag the images and place them in a SQL database
- Achieved using a Flask Python backend communicating with a JavaScript frontend that presents the user an interface to easily tag the images and store the results in a central database

LEADERSHIP, HONORS, AND ACTIVITIES

Varsity Football – *Massachusetts Institute of Technology* — 2017 – Present
- Starting placekicker, school record for most kicking points in a game
- Special Teams MVP, 4 time special teams player of the week

Delta Kappa Epsilon Fraternity – *Alumni Relations Chair* — 2017 – Present
- Wrote and distributed the annual alumni newsletter
- Coordinated alumni events and raised money for house development projects

Little Beavers Running Club – *Student Coach* - https://stepaheadrunning.org/mit — 2018 - Present
- Mentored autistic children weekly during a running program to assist their neurodevelopment

SKILLS

Python, Java, Javascript, C/C++, HTML/CSS, JavaScript, SQL, BlueSpec, Git, Bash, Linux