Rishi Barad

rishib@umich.edu • (248) 613-7474 • https://rishibarad.github.io

EDUCATION

UNIVERSITY OF MICHIGAN   **Ann Arbor, MI**
B.S. Computer Science, B.S. Neuroscience   December 2020
Technical Skills: GPA: 3.3/4.0
C/C++, Python, NumPy, PyTorch, HTML, CSS, JavaScript, React, MySQL, Swift, Hadoop, Flask
Relevant Coursework:
EECS 281 Data Structures & Algorithms | EECS 485 Web Development | EECS 370 Computer Architecture |
EECS 388 Computer Security | EECS 442 Computer Vision
Activities:
Michigan Hackers - *Core iOS Mobile App Team*
Interests:
Backend Engineering, Cloud Data Management, Artificial Intelligence, Mobile App Development

PROJECTS

*Reach out for code samples
Piazza Forum Post Classifier
- Utilized machine learning principles to create a program that computes probabilities for given data
- Developed accurate category label predictions utilizing JSON key-value pairs for a given Piazza forum post

Arduino Tetris
- Implemented a Tetris clone using C++ on an Arduino microcontroller
- Displayed on an Adafruit 32x16 RGB LED matrix and presented at the EECS 183 Showcase

Coordinate Path Finder
- Coded algorithms and heuristics such as Prim's, Arbitrary Insertion, and Branching & Bounding to develop a Minimum Spanning Tree or quick optimal solution to the Traveling Salesman Problem (visiting all coordinates and returning to the origin) for a given set of cartesian coordinates

Computer Vision
- Implemented a program using smart seam carving according to mathematical formulas to dynamically resize a given image
- Utilized pointers along with dynamically allocated memory for memory preservation

Euchre
- Coded a fully functional, complex Euchre game
- Created options for a user to play against other users or to play against the computer that dynamically choose cards depending on other player choices

EXPERIENCE

Michigan Medicine   **Ann Arbor, MI**
Research Assistant   *October 2016 – July 2019*
- Conducted a 3-year pilot study examining the impact of Transcranial Direct Current Stimulation (tDCS) on intensive therapy outcomes for people with aphasia as part of Dr. Carol Persad's University of Michigan Aphasia Program (UMAP)
- Chosen as one of approximately 150 undergraduate researchers nationwide to present results at Harvard College's National Collegiate Research Conference

Frontier Promotions   **Ferndale, MI**
Corporate Trainer - Intern   *April 2016 – August 2016*
- Built brand recognition, increased customer acquisition, and raised brand loyalty for AT&T/DirecTV as well as other Fortune 500 companies and nonprofit organizations
- Promoted to the Corporate Trainer position, allowing me to interview and train new employees