Akik Kothekar
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Education

University of Michigan – Ann Arbor **Sep 2017 – May 2021**

- B.S in Computer Science, GPA: 3.30/4.00

Computer Science Research Experience

Face Shape Classifier **Lenskart.com, Bangalore**
Role- Research and Development Intern ***May 2019 – Aug 2019***

- Developed an efficient algorithm to classify a face into one of six shapes. The algorithm is part of a larger recommendation system that would recommend eyewear based on one's face shape
- Researched trends in facial features of over 500 images using the Face++ Landmarks API to come up with an efficient algorithm and retrained the Inception v3 model for a machine learning approach to the problem.

Interactive RFID **University of Michigan – Ann Arbor**
Professor- Dr. Alanson Sample ***Jan 2019 – Present***

- Researching ways to use RFID tags as cheap, paper thin, battery free, and ultra-low-cost sensors by monitoring changes in the communication between the tag and the reader
- Developing libraries to use this technology for passive activity inferencing, interactive physical objects, and human robot interaction

Successive Over-Relaxation Solver for Linear Systems **Indian Institute of Technology, Mumbai**
Professor- Dr. S. Baskar ***April 2016 – Aug 2016***

- Explored various iterative methods to solve linear systems, which is the core concept of dealing with graphics in a Computer System.
- Studied numerous mathematical concepts such as maximal norms that allowed me to conclude that the iterative algorithms are much more efficient than their alternatives

Computer Science Projects

Forum Post Classifier Software **University of Michigan – Ann Arbor**
Machine Learning and Natural Language Processing ***March 2018***

- Developed a C++ program to automatically classify forum posts on Piazza.com, using Machine Learning and Natural Language Processing techniques.
- Trained the "Multi-Variate Bernoulli Naive Bayes NLP Classifier" for analysis of words using probability scores and a binary search tree data structure.

Technology to Reduce High School Drop-Out Rates in Rural India **Mumbai, India**
Community outreach initiative using CS ***Jan 2016 – August 2016***

- Developed an IT and computer devices-based model that will improve the quality of education in schools across rural India and make it free of cost.
- Published an article - 'An Open letter to the Prime Minister of India from A Teenager', in the Economic Times of India to bring the solution to the attention of the Prime Minister of India
- Project was acknowledged by the Human Resource Development Ministry of India

Arduino Micro Arcade **University of Michigan – Ann Arbor**
Gaming Console made with an Arduino Uno **Nov 2017**

- Developed the arcade game "Space Invaders" for our Arduino console
- Voted best project among 400 other projects, by representatives from Facebook and JP Morgan and Chase.

Skills

Technical Skills- C++, Python, C, Java, Linux Shell, Git, MATLAB, SciLab, LaTex, Arduino
Relevant Coursework- Data Structures and Algorithms, Discrete Mathematics, Applied Linear Algebra, Computer Organization, Probability and Statistics.

Additional

Languages- Fluent in English, Hindi, and Marathi
Michigan Squash Club- I represent Michigan in Squash Tournaments as the No.2 seed and mentor beginners.