www.akikkothekar.xyz Mobile: +1-734-355-7076

Education

University of Michigan - Ann Arbor

Sep 2017 – May 2021

Email: akik@umich.edu

B.S in Computer Science, GPA: 3.26/4.00

Computer Science Research Experience

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

April 2016 – Aug 2016

Professor- Dr. S. Baskar

- 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

Nov 2017

Gaming Console made with an Arduino Uno

- 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.