Akik Kothekar

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Education

- **University of Michigan** — Ann Arbor, MI
  Bachelor of Science in Computer Science. Cumulative GPA- 3.26 — *Aug. 2017 – May 2021*
  Relevant Coursework-
  - **EECS 280**: Programming and Introductory Data Structures
  - **EECS 203**: Discrete Math
  - **EECS 281**: Data Structures and Algorihms
  - **EECS 370**: Introduction to Computer Organization
- **Singapore International School** — Mumbai, India
  IB Diploma; Points: 36/45 (A in Mathematics Extended Essay) — *Aug. 2015 – April. 2017*

Computer Science Projects

- **Interactive RFID** — Ann Arbor, MI
  A research project involving the exploration and application of RFID technology — *January, 2019*
  This project aims at using 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. The applications of this technology include passive activity inferencing, interactive physical objects, and human robot interaction. I am carrying out this project under the guidance of Professor Alanson Sample.
- **Successive Over-Relaxation Solver for Linear Systems** — Indian Institute of Technology, Bombay
  Research Project under the mentorship of a Mathematics Professor — *April 2016 - August 2016*
  The Research project was an effort of over 100 hours including about 45 hours of discussion with the professor. I explored the various iterative methods to solve linear systems and why iterative methods are more efficient than inverting a matrix. I had to learn mathematical concepts such as maximal norms to carry out convergence analysis. The algorithms were used to solve large matrices such as the poisson matrix.
- **Forum Post Classifier Software** — Ann Arbor, MI
  A project involving 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.
- **Using technology to reduce high school drop-out rates in rural India** — Mumbai, India
  Project was acknowledged by the Human Resource Development Ministry of India — *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. I published an article - 'An Open letter to the Prime Minister of India from A Teenager', in the Economic Times of India to bring the issue and the solution to the attention of the Prime Minister of India
- **People's Choice Award for Best Project- Micro Arcade** — Ann Arbor, MI
  Chief of Software — *November, 2017*
  Our gaming console 'Omega' was voted as the best project out of 400 other projects by representatives from Facebook, JP Morgan and Chase and the EECS 183 professors. The console consisted of an arduino uno at its core. We developed the game 'Space Invaders' for this console.

Additional

- **Technical Skills**: C++, Python, C, JAVA, Linux Shell, Git, MATLAB, SciLab, LaTex, Arduino
- **Michigan Squash Club**: I represent Michigan in Squash Tournaments as the No.2 seed and mentor beginners.