Akik Kothekar

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EDUCATION

University of Michigan, College of LS&A

Ann Arbor, MI Bachelor of Science in Computer Science; GPA: 3.1 Aug. 2017 -Relevant Coursework-

• **EECS 183**: Grade- A

• EECS 280: Grade- Currently enrolled

o EECS 203: Grade- Currently enrolled

Singapore International School

IB Diploma; Points: 36/45 (A in Mathematics Extended Essay)

Mumbai, India Aug. 2015 - April. 2017

Email: akik@umich.edu

Computer Science Projects

Successive Over-Relaxation Solver for Linear Systems

Indian Institute of Technology, Bombay April 2016 - August 2016

Research Project under the mentorship of a Mathematics Professor

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.

Using technology to reduce high school drop-out rates in rural India

Mumbai, India

Community outreach Initiative using Computer Science

Jan 2016 - August 2016

The project received an acknowledgement from the Human Resource Development Ministry of India. Developed an Information Technology and Computer Devices based model that will make education, in middle and high schools in rural parts of India, free and improve the quality of education. 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

Micro Arcade Ann Arbor, MI Chief of Software November, 2017

Developed the game 'Space Invaders' using C++ and run it on an arduino board, using a 16x32 RGB LED board as the display. The project was the final project for EECS 183 and was highly acknowledged by the EECS 183 faculty. As a 'reach' initiative, we coded a two player game based on Space Invaders. To complete this project, the team had to learn about using the arduino IDE and the circuit.

Employee and Payroll Management System

Mumbai, India

IB Computer Science HL project

January, 2017

Developed a software which manges a database of employees and their respective payroll data. The software would allow the user to edit the data in the database

Essay on RSA Encryption

Mumbai, India

IB Mathematics Exploration

January, 2017

Explored the mechanism of the RSA cipher and studied the basics of how it is useful in online transactions and banking

Extra Curricular Activities

- Squash: Ranked 38th in India. Participated in national level tournaments
- SIS Computer Science Club: Started the computer science club in my high school.
- Quiz Bowl: Participated in the quiz bowl every year. Runner-up in senior year.