

Kalyan Madanapalli

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Education

Virginia Polytechnic Institute and State University

- Major: Computer Science
- Cumulative GPA: 3.52
- Predicted Graduation Date: May 2018

Skills

- Proficient in programming languages: Java, Python, C
- Experience in programming languages: JavaScript, BASIC, MATLAB, Assembly Language (x86)
- Experience in web development: HTML, PHP, MySQL, CSS
- Experience with software: Microsoft Products (Word, Excel, PowerPoint), Linux, GitHub, Inventor, OpenCV

CS Classes, Projects, and Assignments

Data Structures: Worked on a song database that uses various data structures such as doubly linked list and hash tables (Java)

Data Structures: Simulated a rollercoaster line using queues and circular linked lists (Java)

Artificial Intelligence: Worked on various Computer Vision algorithms such as Gaussian blurring, Hough circle transform, and Canny Edge Detection (Python)

Artificial Intelligence: Wrote a program that solves standard 9x9 Sudoku puzzle (Python)

Parallel Computing: Worked with Mandelbrot Fractal Imaging (C)

Parallel Computing: Wrote a program that made 3D images with a ray tracing algorithm (C)

Data Structures: Solved the Towers of Hanoi puzzle through recursion and showed it visually in an animation (Java)

Computer Organization: Wrote basic operations such as subtracting and comparing two integers through manipulating bits with only Boolean operators such as AND/OR. (C)

Computer Organization: Successfully defused the binary bomb which was a series of puzzles in Assembly Code (x86)

Extra-Curricular & Work Experience

REI Systems Summer Intern (Herndon, VA)

- Worked with Excel on various assignments
- Drew custom graphics to organize given information

August 2014

CS/ECE Undergraduate Research

- Took measurements in Railroad Station in Staunton, VA to evaluate the suitability of DSRC technology
- Worked with cognitive radio testbeds

August 2016-
December 2016

Virginia Tech Programming Team

- Weekly Competitions composing of over one-hundred participants
- Developed keen problem solving skills
- Experience with analyzing and understanding complex situations quickly

August 2016 -
Present

CS 2505 Teaching Assistant

- Helped students in the course CS 2505 with homework and relevant coursework

January 2017-
Present