Sai Karthik Ammanamanchi

Undergraduate Computer Science and Engineering student at National Institute of Technology Calicut. Machine Learning and Competitive Coding Enthusiast.

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EXPERIENCE

Microsoft, Hyderabad — *Software Development Intern*

MAY 2018 - JUNE 2018

Worked on developing a POC for Microsoft's mailing service which will restrict the end to end flow of delivering campaigns with localized, user-targeted and reporting enabled Emails to internal services within the organisation.

MLabs, NIT Calicut — Student Member Cohort 2017

FEBRUARY 2017 - PRESENT

Developed an app which overlays the label of the exercise the person is performing using human pose estimation in real time.

Currently working on replicating the Amazon Go store model through Computer Vision concepts.

Computer Science and Engineering Association, NIT Calicut— Executive and Web Admin

OCTOBER 2016 - PRESENT

Conducted workshops and coding competitions for the students of NIT Calicut.

Development and maintenance of CSED, CSEA and Coding with Seniors websites.

Indian Society for Technical Education, NIT Calicut — *Executive and Web Admin*

APRIL 2016 - PRESENT

Conducted workshops, talks and coding competitions for the students of NIT Calicut.

Development and maintenance of ISTE's website.

SKILLS

C++, python, Git, HTML, CSS, JS, PHP, MySQL, Django, Firebase, x86 assembly, LISP

LANGUAGES

English, Telugu, Hindi

EDUCATION

National Institute of Technology Calicut

B.Tech, Computer Science and Engineering

CGPA: 8.6

AUGUST 2015 - Present

Sri Chaitanya Junior College, Visakhapatnam *Intermediate*

Percentage: 98.5
JUNE 2013 - APRIL 2015

PROJECTS

Art Gallery Problem using Seidel Triangulation

APRIL 2018 - APRIL 2018

Visualized the solution to the art gallery problem by using vertex 3 coloring on triangulated polygons obtained by applying Seidel's algorithm onto the original polygon.

Analysis of Parameterized Algorithm for Minimum feedback vertex problem

JANUARY 2018 - MARCH 2018

Comparing and visualizing the performance of bruteforce solution and parameterized solution using Iterative compression and Bounded search tree techniques on minimum feedback vertex set problem.

Analyzing performance of string matching algorithms on genetic data sets

MARCH 2018 - MARCH 2018

Compared the performance of single and multiple pattern string matching algorithms like Rabin–Karp algorithm, Knuth Morris Pratt(KMP) algorithm and Aho Corasick algorithm with specific patterns(TAGA,TTCG etc) on DNA sequences of monkey species called Pan paniscus.

Xperimental Operating System

AUGUST 2017 - NOVEMBER 2017

Implemented functionalities handling

- 1.Process Management: scheduling and dispatching processes to the CPU with additional support for multi-programming.
- 2.Memory Management: allocating memory for processes with support for demand paging.
- 3. System Calls

Securing the computer through an external USB device

SEPTEMBER 2017 - OCTOBER 2017

Modified Linux Kernel code to facilitate the following functionality:

The boot process of the computer completes only when a usb device with valid key is plugged into the computer.

Faculty Advisory System

AUGUST 2017 - OCTOBER 2017

Faculty Advisory System is basically updating the manual process of registration into an internet based application so that a faculty member can directly register a student, of whom (s)he is a faculty advisor, for a course in case the student has no library or hostel dues.

CERTIFICATIONS

Machine Learning by Prof. Andrew Ng, Stanford University

LINKS

Github: https://github.com/gottacodeemall

Codechef: https://www.codechef.com/users/saikarthik12

Linkedin: https://www.linkedin.com/in/karthik-ammanamanchi/