



## AJAY KAARTHIC J

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### EDUCATION

#### **Sri Venkateswara College of Engineering, Chennai, India**

Bachelor of Technology in Information Technology (Aug 2016 – Oct 2020)

- Course work: Data structures, OS, DBMS, Object Oriented Analysis & Design, Automata & Compiler Design

### PROFESSIONAL EXPERIENCE

#### **Associate Software Engineer – athenahealth, Chennai (Oct 2020 – Present)**

- Part of a Fastrack team responsible to address 21 Century Cures act, building a GraphQL server to fetch data from FHIR servers.
- Designed, developed, and tested a feature for providers to delegate administrative work to non-providers which enables the providers to focus on functional responsibility.
- Helped in coding to maintain the tech and functional stability.

#### **Software Engineering Intern – athenahealth, Chennai (Jan 2020 – Oct 2020)**

- Developed a feature for healthcare providers to easily attach files to a patient chart.
- Developed a UX feature that reduces the chances of error for BPO agents.
- Designed and developed a prototype search engine for patient documents using ElasticSearch, GraphQL and AWS.
- Developed a prototype to recognize handwritten text using Mxnet.

#### **Freelance AI Consultant - Dforth technologies, Chennai (June 2019 – Jan 2020)**

- Solely built a Computer Vision system for swingzen.com with PoseNet and TensorFlow to analyze the swing action of golf players and track the trajectory of the golf club. The app was presented at PGA show, USA on Jan 21, 2020.

#### **Summer Intern - Siemens Ltd, Chennai (May 2019 - June 2019)**

- Automated pre-processing and postprocessing of FEA analysis in Ansys using Python.
- Developed a distributive software to extract data from pdf and feed it to Excel.

### RESEARCH PROJECTS AND PAPER PUBLICATIONS

#### **Personal Fitness Management (July 2019 – Mar 2020)**

- Developed a system to evaluate correctness of an exercise using pose estimation and deployed at AWS EC2

#### **Autonomous Drowning Rescue System (June 2019 - Sep 2019)**

- Implemented an object recognition model using YOLO to identify and locate humans who are about drown in water and feed the result to a mechanical device which triggers a lifebuoy to rescue the target person.

#### **Road's Eye (Sep 2018 - Feb 2019)**

- video surveillance application for the vehicles on the road which identify vehicles violating the traffic rules using computer vision.

#### **A Survey on Cross VM Side Channel Attack in Cloud Computing: IJRAR Sep 2018, Volume 5, Issue 3**

- <http://www.ijrar.org/papers/IJRAR190B023.pdf>

### TECHNICAL SKILLS

Programming Languages: Python, C, C++, Javascript, SQL, Perl

Machine Learning Frameworks: OpenCV, TensorFlow, Scikit-learn, NumPy, Pandas

Web Technologies and Tools: Node.js, GraphQL, JIRA, Perforce

### HONORS AND AWARDS

#### **Honourable mention at IEEE YESIST 12 (Sep 2019)**

- An International Innovation Challenge with the participants from nearly 10 countries, held at Stamford International University, Thailand.

#### **Winner of VIVID 19 (Mar 2019)**

- A National level Project competition with over 100 participants from the country held at SSN College of Engineering, Chennai, India.

#### **Winner of Mozo Hack (Mar 2019)**

- A 36-hour Hackathon organized by MOZO club with more than 50 teams, held at SRM University, India.

#### **Winner of VISAI 19 (Feb 2019)**

- An International Project competition and exhibition held at Vel Tech University, India and over 80 Universities participated.

#### **Winner of Hack and Tackle (Feb 2019)**

- A 24-hour Hackathon with 45 teams organized by SSN-IEEE held at SSN College of Engineering, India.