

GANESH RAM KESARLA SHANTHARAM

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EDUCATION

CARNEGIE MELLON UNIVERSITY (December 2019)

Professional Masters in Software Engineering

Courses: 17-651 Models of Software Systems, 17-652 Methods: Deciding What to Design, 17-653 Managing Software Development, 15-513 Introduction to Computer Systems

Indian Institute of Technology Roorkee (May 2015)

Relevant Coursework (GPA 9.6/10)

Computer Systems & Programming, Electrical Science, Fundamentals of Electronics, Mathematics-1, Mathematics-2, Numerical Methods, Optimization Techniques, Engineering Computation, Process Automation, Physics-1, Physics-2

SELECT PROJECTS

Selfie Based Song Recommendation

Technologies - Theano, Python, AngularJS, Flask, AWS

Trained a convolutional neural network on an EC2 instance to recognize emotions. A collection of 35000 pre-classified photos were used. Selfie captured in real time was passed through the trained CNN to determine the mood of the person. Based on the mood predicted appropriate song recommendations were made.

Smart Office (IoT @ IITR)

Technologies - Raspberry Pi, Arduino, Zigbee, Apache, PHP, JS

In order to reduce wastage of electricity at the student activity center, built a wireless network of sensors and actuators to monitor and control all the appliances over a web application. The sensor data retrieved in real time was fed into a learning algorithm to understand the usage pattern and control the devices autonomously. The energy consumption decreased by 12%.

WORK EXPERIENCE

October 2017 - June 2018 | Freelancer

Elicited Requirements, Designed product architecture and built the complete IoT and Web stack for DigiB that broadcasted location-based ads in tourist buses; Worked with BeatRoute, a logistics startup to develop a demand predictor (DNN) for better inventory management of local grocery stores.

May 2017 - September 2017 | Software Engineer, CloudxLab

As a Full Stack Developer, built applications in Django, Angular & Bootstrap; Built a code evaluation application that involved a browser-based terminal & SSH Client, and a cloud-based REPL environment.

September 2016 - April 2017 | Founder & CEO, Entrochef

Entrochef is an online marketplace for on-demand home cooked meals. The model was similar to Uber and Airbnb but in the food space. Based on the user's location, home cooked meals in the vicinity could be viewed and ordered. (Transformed the idea into → ~160 daily users).

May 2015 - September 2016 | Software Engineer, AUTONINJA

Caused a ~10% increase in the revenue per client by identifying and building a solution that prevented parallel logins; As a Full Stack Developer, built end to end web applications involving Webhooks, Websockets, Audio Streaming, Internet Telephony, Authentication, UI & UX in Material Design, Database design and Queries; Owned repositories of 2 core features; Conducted Technical Interviews & Training Sessions for Freshers.

May 2014 - July 2014 | Computer Vision Internship at QORQL, Digital Healthcare Startup

Researched and developed edge detection algorithms that were used in a scanner app on android. Developed a custom heuristic algorithm to identify paper documents. **Technologies - Matlab, OpenCV, Java**

June 2013 - July 2013 | Internship at BHEL, Electronics Division

Modeled and simulated solar cells. Implemented & analyzed the performance of "Perturb & Observe" and "Incremental Conductance" MPPT algorithms. **Technologies - Matlab (Simulink)**

SKILLS: Python, MySQL, Javascript, Matlab, Shell, Django, MEAN, Product Design and Engineering

(Please refer to my [website](https://ganeshramks.github.io) for a comprehensive list of projects, accomplishments and leadership experience.)

ACCOMPLISHMENTS [[Child Prodigy](#), [Tech Competitions](#), [Academic Awards](#)]

LEADERSHIP EXPERIENCE [[Secretary of Artificial Intelligence Society](#), [Class Representative](#), [Teaching Assistantship](#)]

SPORTS

Enjoy skating and have been a prominent member of the In-line skating team of HEC at IIT Roorkee since 2013