Chethan Kothwal

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EDUCATION

2018-present	**ILLINOIS INSTITUTE OF TECHNOLOGY**	Chicago, IL

Master's degree in Computer Science, Expected May 2020
Coursework: Enterprise web development, Software systems architecture, Big Data technologies
GPA: 3.45/4.0

2013-2017	**SJB Institute of Technology**	Bangalore, India

Visvesvaraya Technological University, India.
Bachelor of Engineering in Information Science

EXPERIENCE

BLOCKLIGHT Chicago, IL
Backend Developer Intern (June'19-Aug'19)

- Contributed to design, development, and scaling of an e-commerce web application based on Django MVC framework. Designed and implemented custom modules using Python to connect to third-party APIs such as Shopify, Mailchimp and twitter to generate new business metrics.
- Built and maintained data pipelines to the front-end analytics dashboards and managed back-end database system using MySQL.
- Solely designed and implemented twitter integration for social media manager of the platform as a separate Django application from scratch. This application allows users to browse timeline tweets, mentions tweets and reply to direct messages within the platform. Built the application using open source tweepy library.
- Fixed technical issues that had broken the platform during the beta program and successfully completed Unbank ventures accelerator program. Work directly contributed to the stable foundation which the company used to successfully source financing at the completion of the summer and started on boarding beta users to provide product feedback.
  (HTML, CSS, Python, Django, MySQL)

FINETSA TALENT TRANSFORMATION SERVICES Bangalore, India
Software Developer Intern in IoT (Jan,18-July'18)
Vehicle tracking system

- Developed the firmware in C for commercial prototype of an IoT based vehicle tracking device that programs the micro-controller unit (STM32 F030CC) to work with GPS device and modem (Quectel MC60) to fetch the GPS coordinates.
- Implemented a MQTT- protocol connection that publishes the GPS coordinates to AWS-IoT server.

Home Automation system

- Developed an application in C for raspberry pi using Paho-mqtt open source library and mosquitto open source server library to set it up as a local hub for a home automation system.
- Programmed an application in C for esp-32 MCU's that collects the data from the sensors and switches to send the data to the local hub. Implemented a MQTT- protocol connection that publishes the data from local hub to AWS-IoT server.

SKILLS

Intermediate: Python, C, Java, MySQL, HTML, CSS, Django
Beginner: JavaScript, Hadoop MapReduce, Apache Spark, Apache Kafka.
AWS technologies: EC2, S3, EMR, RDS.
GitHub: github.com/ckothwal123.

PROJECTS

TicketHub (Enterprise Web development):

- Developed a web application using Java servlets that allows users to look upon different sports events across the country and book tickets for the events.
- Batch processed the data for the events using python requests to StubHub API and stored in MySQL database.
- Reviews for the user experience for the website is stored in MongoDB.

Comics REST API:

- Developed an application in Django that scrapes different websites for heart and brain, Garfield and Calvin Hobbs comics using beautiful soup library through celery background tasks and store them in a MySQL database.
- The application schedules Celery background tasks through RabbitMQ to upload the images to an AWS S3 bucket.
- The application is built using Django REST Framework (DRF) to provide RESTful API's to the end user to access these comics. Users can also upload new comics through REST API endpoint.