HARSHA KALYANARAMAN

 linkedin.com/in/khvr Boston, MA kalyanaraman.ha@northeastern.edu github.com/khvr 857-800-5215

EDUCATION

Northeastern University, Boston, MA　　　　　　　　　　　　　　　　　　　　　　**Dec 2020**
Master of Science in Computer Systems Engineering, Internet of Things Specialization　　　**GPA: 3.5/4**
Courses: Data Networking, Connected Devices, Web Development, Object-Oriented Design

SRM Institute of Science and Technology, Chennai, India　　　　　　　　　　　　　　**May 2018**
Bachelor of Technology, Electronics and Communication Engineering　　　　　　　　　　　**GPA: 9/10**
Courses: Data Structures, Computer Communication

TECHNICAL SKILLS

Protocols and Architecture:	MQTT, CoAP, Microservice, RESTful, MEAN
Programming Languages:	Python, JavaScript, C++, Java, CSharp
Software Engineering:	Agile SCRUM, JIRA, Git, Team Foundation Server (TFS), Maven, Jenkins
Hardware hands-on:	Raspberry Pi
Cloud technologies:	EC2, S3, SNS, Dynamo DB, Circle CI, ELB, Google Cloud services
Web Technologies	HTML, CSS, BootStrap, AJAX, ReactJS, jQuery, JSON, Node.js, Angular, AWS deployment, OAuth 2.0, JWT, ASP.NET

WORK EXPERIENCE

IT Division, SEC Of Massachusetts, Boston-MA
Application Developer Intern　　　　　　　　　　　　　　　　　　　　　　**Jan 2020 - Jun 2020**

- Developed a Full stack web app using HTML5,CSS, Javascript,SQL with **.NET** framework enabling users to select and register for workshops
- Implemented the web application using ASP.NET web Form (Master page, user controls, validation controls and AJAX extensions) and Web services, Windows communication foundation (WCF) and ASP.NET Web API
- Designed, programmed, and delivered a Microsoft .Net Web application to allow administrators to modify any part of the application and to keep track of the workshops and registrants using **ADO.NET** and **JQuery**
- Evaluated, re-programmed, and Collaborated to rebuilt a legacy Microsoft .Net Web application and Created SQL scripts using **TSQL** (Stored Procedures and Triggers),**LINQ** as ORM and generated PDF using Crystal Reports

PROJECTS

Cloud Computing, Northeastern University, Boston-MA [Cloud Deployment]　　**Aug 2019 - Dec 2019**

- Developed a backend application with REST API architecture (**Node.js,PostgreSQL**) for recipe Management System which is deployed on EC2 instance ,ELB to distribute traffic and implemented CI/CD pipeline with **CircleCI** which creates an artifact to be put in S3 bucket. The artifact is then deployed using AWS code deploy
- The infrasturcture of the application including VPN, EC2, ELB, SNS, Lambda Function, SES, RDS, DynamoDB, S3, Route 53, CloudWatch, Autoscaling Group based on cloudwatch trigger,and IAM (Roles and policies) etc. are brought up using **Terraform**
- The user of the app can request for links for all his recipes which is achieved using a **lambda** fuction which executes a SES script to send a automated mail to the users registered e-mail address

Hotel Booking App, Northeastern University [Node.js]　　　　　　　　　　　**Jan - April 2019**

- Directed a team to deploy a web application using **MEAN** Architecture for potential customer to book a reservation at a hotel based on the location provided
- Implemented Node server at backend with **MongoDB** as database and **AngularJS** for frontend client

Fire Alert Safety System, Northeastern University [IoT/Python]　　　　　　　**Feb - April 2019**

- Brainstormed a IoT-Architecture based solution with python that reads sensor data (temperature, humidity, smoke) from the SenseHAT of **Raspberry Pi** to automate fire detection in a given space for alerting and to collect valuable data sent to Cloud for further analytics purpose
- Formulated a threshold when breached sets a variable which is subscribed(**MQTT**) by the Actuators, the cloud stores data (JSON file) in its DB for actuation and future prediction