Neelabh Kumar

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Education

Siddaganga Institute Of Technology   Tumakuru, KA
BS Computer Science   August 2010 - June 2014

Rochester Institute of Technology   Rochester, NY
MS Computer Science *GPA: 3.50*   Aug 2018 - May 2020

Experience

VMware   Atlanta, GA
Intern Internet Of Things R & D   May 2019 | Aug 2019

- Made headway in the relatively unknown domain of ZigBee Device and capability discovery.
- Programmatically discovered device, procured device information and capabilities, and enabled secure and reliable communication with the VMware pulse IoT center using API.
- Worked with the broader ecosystem, got feedback from the field and tailored the product/code accordingly which lead to potential customer success.
- No need to discover the devices and the capabilities manually, saved a lot of time and man hours for corporations.
- Accomplished the goal with using open source modules and tailoring it according to the need.

Oracle India Private Limited   India Development Center. Bengaluru, KA
Software Developer   Oct 2015 | May 2018

- Developed software modules using Java and Oracle DB, used REST and SOAP web services for cloud infrastructure.
- Implemented HTTP routing verification algorithm for Oracle HTTP Server which led to a reduction in manual intervention in debugging and resolving customer routing issues by 80%.

KPIT Technologies   Bengaluru, KA
Software Developer   Aug 2014 | Oct 2015

- Automotive embedded software development for car Body Electronics that range from driver and passenger comfort and convenience to security and in-vehicle networking with involvement in every phase of SDLC.
- Developed scalable high-quality software solutions, readily customizable to customer requirements, using Embedded C, Local Interconnect Network (LIN), and Controller Area Network (CAN) protocol.

Skills

Programming Languages:	Python, C, Java, JavaScript.
Tools and Frameworks:	Express, Git, Telegraf, Node.js
Database Systems:	MYSQL, MongoDB, H2DB, Influx
DevOps:	Docker, Kubernetes, Docker Swarm
Monitoring Tools:	Grafana, Prometheus, Influx2.0

Projects

Communication Network for Constantly Moving Lunar Rovers *Java, Networking*
Programmed a radio network simulated by multicast IP which is enabling communication between 8 lunar rovers which are constantly moving around the moon's surface. Implemented a distance-vector routing protocol called RIPV2 for the rovers which enables them to dynamically move around and keep pushing the information on the multicast network. Designed a networking protocol using UDP with the reliability of TCP.

Historical weather data Visualisation *Node.js, Express, React, Influx DB, Node-Influx*
Designed and Implemented a web based application which supported the querying, visualisation and analysis of historical weather data of multiple cities and supported around last 15 years of weather data.

Edge Metric Collection, Monitoring and Command-Action Framework *Node.js, Express, React, Influx DB, IFQL, Flask, Telegraf, IoT, Time series DB*
Designed and Implemented an IoT solution with Edge device monitoring capabilities, environment metric collection, A command action framework from cloud to edge device and facilitated a two way communication between cloud and edge.