

Avinash Kothapalli

Senior Software Developer



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📍 Ottawa, ON

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Skills

Languages

Python, Javascript, Java, C, C++

Core Technologies

Distributed Systems, SDN/SD-WAN, Networking Protocols, VMware/OpenStack, Microservices, Serverless computing, Information Centric Networking

API Protocols

REST, Yang/RESTCONF, gRPC, Kafka, Kafka-Streams, SOAP

CI/CD

Docker, Kubernetes, AWS, Jenkins, GIT, VSCode

Supplemental

Game Dev: UE4, Jmonkey, Blender
ML: GPT-3, Harmonai

Interests

Sports (Table Tennis, Volleyball, Skiing, Biking, Running)

Music Production (Guitar, Sonic Pi, Garageband)

History / Travel

Professional Experience

Senior Delivery Software Engineer, *Nokia*

04/2020 – present | Ottawa, Canada

Develop custom network software solutions for service providers and enterprises

- Create API interfaces for service provisioning, life cycle management, un-provisioning and debugging using Yang Models and REST
- Provide solutions to automate network service deployment based on customer network configuration and OSS system requirements
- Deploy custom scripts written in JavaScript and Python, utilizing Nokia's NSP applications framework for workflow management, service discovery and deployment
- Interact closely with various telecom industry customers and partners (Bell, Verizon, Mobily, TPG, Elisa, etc)
- Guide Junior team members and Interns
- Created custom VS code webview extensions using NodeJS, React and Bootstrap

Member of the Technical Staff – II, *VMware*

07/2016 – 04/2020 | Ottawa, Canada

Involved in developing key proof of concept software for the Telco BU

- Worked on converting the Smarts Alerting Engine architecture into a Microservices model using Kubernetes, Kafka and gRPC
- Core java development for Versa SDWAN and SAS integration
- Developed a Python based high performance data collector and a push gateway that extracts information from various third-party entities such as SD-WAN and SDN orchestrators
- Created a Python based Velocloud SD-WAN network simulator using the corresponding swagger REST model
- Worked on prototype Angular Frontend UI for the Smarts Alerting Engine product
- Evaluated Kafka Streams and Flink for KPI metric processing
- Took responsibility for Nokia ASAM and VMware SAS certification process for the customer British Telecom

Software Engineer, *Cisco Systems*

07/2012 – 06/2016 | Ottawa, Canada

Protocol level software development for Cisco IOS/XR

- Worked on implementing MPLS TP performance management (RFC 6374) and linear protection (RFC 6378)
- Contributed in the development of evpn, vpws, vpls, l2tpv3 and l2-bridge domain
- Developed tools for unit testing internally
- Expertise in LDP, BGP, and MPLS Traffic Engineering
- Maintained team's private cloud infrastructure using Cisco UCS servers with vSphere and OpenStack

Software Designer / Protocol Associate (Coop), *Blackberry*

05/2010 – 09/2011 | Ottawa, Canada

Interned with different teams over a period of 16 months

- Developed minor features for the Blackberry device Radio and OS modules in C and Java
- Analyzed wireless protocol performance