# **VIVEK BHAT**

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#### SOFTWARE DEVELOPMENT ENGINEER

Talented Software Engineer with experience designing, developing and deploying AI (Artificial Intelligence) solutions for clients in multiple industries. Demonstrated design and delivery of end to end complex AI solutions to clients in the Cloud. Collaborative communicator adept at working with internal and external cross-functional teams to drive initiatives. Certified AWS Solution Architect

#### AREAS OF EXPERTISE

Software Development Artificial Intelligence Cloud Solutions
Requirements Gathering POC (Proof of Concept) REST APIs
Agile/DevOps Infrastructure Orchestration CI/CD

#### **CORE TECHNICAL COMPETENCIES**

**PROGRAMMING** Java, Scala, TypeScript, Ansible, Bash, Python, JavaScript, NodeJS,

Make, Makefile, Knockout.js, jQuery, RUBY, Ruby on Rails, HTML5,

CSS, Bootstrap, XML, JSON, C, C++, JUnit, Selenium, Mocking

DATABASES MySQL, MariaDB, AWS Aurora, DynamoDB, AWS Redshift, Redis,

Memcache, Postgres SQL

**TOOLS & UTILITIES** AWS, Teamcity, Rally, GitLab, Terraform, JIRA, Docker, Kubernetes,

Vagrant, Elasticsearch, Logstash, Kibana, Git, Maven

**OPERATING SYSTEMS** OS X El Sierra, Windows, Ubuntu, CentOS, Kali, Mint, Zorin

#### **EXPERIENCE**

### **INTEL** - Hillsboro, Oregon

October 2018 - present

## **Software Development Engineer, Corporate Data Office**

Working in a fast-paced agile team at Intel to develop and deliver multiple projects for Machine Learning and Artificial Intelligence

**Project:** Central Data Repository

### **Data Ingestion and Pega Development**

- Developed the Mailing system to send emails when any process fails and handle exceptions
- Updated the UI, refactored multiple models and controllers in the Angular based web application UI for a better user experience.
- Successfully released a new Rule Set Version which had significant updates to the PEGA workflow and integrated the data ingestion changes to the new rule set.

**Project:** Retail Promotion Analytics

#### **Infrastructure and Full Stack Development**

- Used technologies such as AWS API Gateway, Cognito and Lambda to expose our Flask App docker image stored in AWS ECR and app in AWS ECS Fargate and ALB
- Implement services like AWS Lambda and CloudWatch reducing costs by 70%.
- Developed the User and Authentication flow in the Angular JS based application integrated with AWS Cognito
- Authenticated the rest calls to API Gateway backend from the front end

## INTEL - Raleigh, NC Jan - October 2018

Software Architect/Software Development Engineer, Intel Saffron Professional Services

Worked as a part of the Professional Services team that developed and delivered AI solutions to multiple clients.

#### **Software Development**

- Developed API's in Java and Python to facilitate AI product REST querying and processing, enabling concurrency and faster results in client environments.
- Successfully completed AI projects in client environments using various algorithms in conjunction with the AI product, adept at rapid prototyping for fast turnaround times in POC's (Proof of Concept) and very well versed in interfacing with Clients.
- Delivered end to end client projects (POC's) integrating Data Science techniques under tight time lines.

## **Cloud Infrastructure Solutions (AWS Certified Solutions Architect)**

- Create highly available, redundant and fault tolerant clusters on AWS for Intel Saffron customers.
- Designed and implemented a highly available AWS architecture to migrate our conventional sales and demo servers to a centralized AWS infrastructure resulting in a 60% cost reduction.

### **Product Development Projects**

Intel Saffron one-click Installer.

Completely automated the process of conventional Saffron installation by creating a pipeline using Ansible, Docker, Docker Swarm and Bash scripting which reduced the installation time by 50% and removed any margin of human error.

Centralized Logging with Elastic stack, Project Owner.

Developed the new logging mechanism to visualize logs for SMB using Elastic stack to monitor and get logs from worker nodes

Removed the NFS mounting of log directories to achieve a centralized logging system which in turn reduced network latency by 50%.

#### **SDE Intern, Professional Services**, 2017 (6 months)

As an intern built the Intel Saffron Java REST API from the ground up including the design and development of the Al's Java REST tool encapsulating unique security protocols and complex API classification and recommendation, leveraging AI product and reducing the time to POC's.

• The tool enabled 10x faster API calls and space creation and provided simpler and easy to use rest API calls for the client user.

### **EDUCATION**

Master of Science in Computer Science - North Carolina State University, Raleigh, NC

Bachelor of Technology - Jamia Millia University, New Delhi, India

# **ADDITIONAL ACAMEDIC PROJECTS**

Kubernetes-deployment, uses Kubernetes, docker, AWS, Vagrant

(git.io/fNOKh)

Created a 3-node cluster using Vagrant and AWS to deploy a multi-tiered microservices based application using Kubernetes and performed rolling updates of the updated docker images.

Serverless Repos, uses AWS-S3, Route53, API Gateway, Lambda

(git.io/fNlul)

Collection of various AWS Lambda and serverless deployments such as a serverless REST API, S3 events, EC2 management.

### **LEADERSHIP AND VOLUNTEER SERVICE**

Project Lead for a new feature in an AI product development at Intel

President of IEEE JMI Student Branch and IEEE JMI Computer Society (2015-2016).

Dr J. K. Pal Memorial Award for the IEEE Best Student member 2016 from IEEE Delhi Section