

# Deepalakshmi Thiagarajan

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#### **TECHNOLOGIES AND SKILLS**

Java, Spring Framework, SQL, Oracle, REST, Microservices, React, JavaScript, TypeScript, HTML, CSS, Webpack, Node.js, Python, Django, Cassandra, Terraform, Kafka, Docker, Git

#### PROFESSIONAL EXPERIENCE

Brillio | Client: Silicon Valley Bank | Architect | San Ramon, CA (remote)

Senior Lead Engineer

Sep 2021 - Jun 2024

# Modular Micro-frontend application using build-time and run-time mechanisms

Developed prototypes for rearchitecting a monolithic banking app in React to a modular micro-frontend application to achieve an independent software lifecycle for each banking domain of an enterprise banking application. The prototype has been adopted to be implemented in production, and I am currently contributing towards the first phase of the project which is build-time isolation. This enables each banking domain package to be independently built, and published as npm library, so that they can be consumed from the banking application thus achieving independent build cycle and build time isolation.

# Development and maintenance and banking application

<u>Reusable UI components</u>: Implemented new features and fixes involving reusable global components used in the banking application using React, Material UI in TypeScript.

<u>Java Microservices</u>: Implemented new features/fixes for the back-end of the banking application which comprises multiple Java Microservices based on Spring Framework.

# NodeJS, React and TypeScript upgrades

Involved in upgrading React and Node.js for an Enterprise banking hybrid mobile web application to use newer versions of NodeJS and React. This involved research, troubleshooting, and adapting the existing source code to work with the newer versions of Node.js, React and TypeScript.

Akamai Technologies | Senior Software Development Engineer in Test | Santa Clara, CA | Sep 2016 - Sep 2021 |
Software Development Engineer in Test | Jun 2013 - Sep 2016

- Designed and developed automation framework for testing 80+ REST APIs for Identity and Access Management (IAM) application of Akamai portal using Java, SQL, and related frameworks.
- Engineered user and role provisioning automation tests to verify RESTful APIs for IAM system controlling access of 200,000+ users to Akamai portal, reducing manual testing time by more than 300% in each release.
- Constructed <u>CLI tool in Python</u> to provide a way to interact with and obtain Identity Management related information through Akamai's Open APIs.
- Identified performance issues by developing and executing load tests on REST APIs using Scala and Gatling that
  measure latency and scalability of on-premise and cloud environments
- Implemented tests for new Terraform service provider for IAM in Go.
- Trained and mentored new team members and interns.

#### Shutterfly | Software Engineer | Redwood City, CA

Feb 2013 - May 2013

Developed new products and features for Cards and Stationary sections of Shutterfly website using JavaEE, Spring, JSP, and Servlets, with JavaScript, HTML, CSS and on the frontend.

# Akamai Technologies | Application Software Engineer, Intern | San Mateo, CA

Jun 2012 - Nov 2012

Apr 2020

Dec 2017

Designed and implemented text parser in Perl to read 2+ million URLs present in input log files, identify and isolate certain URLs based on various rules for usage analysis and security research.

#### **EDUCATION**

M.S. Software Engineering (Enterprise Software Technologies), San Jose State University	May 2013
M.S. Managing Information Technology, Sullivan University	Sep 2016
B.Tech. Information Technology, Anna University	May 2011
CERTIFICATIONS	
VMware Spring Professional 2021, VMware	Apr 2021

# PERSONAL AND HACKATHON PROJECTS

Full-stack Web and Mobile Developer Bootcamp, Nucamp.co

Oracle Certified Professional Java 8 Programmer, Oracle

- Microservice using Spring Boot backend: As a hackathon project in Brillio, designed and implemented the authentication microservice using Spring Security to provide JWT based authentication and to enforce Role-based authorization. It was packaged as a Docker container, and deployed in AWS ECS making use of Fargate. *github*
- Efficient monorepo management: As a hackathon project in Brillio, built a monorepo consisting of React and
  Angular applications implementing a micro frontend architecture using Nx build system to demonstrate increased
  developer productivity by making use of integrated end to end tests and powerful integrations. github
- **Spring Boot Microservice**: Created a microservice implementing 6 RESTful endpoints using JPA with MySQL, packaged web service as a Docker container communicating to separate a database container using Docker network, and published it to dockerhub. *github*
- Chatroom App using Spring and Web Socket: Built an online chatroom built using the WebSocket protocol, using
  Reactive Spring in the backend and AngularJS in the front end, where multiple users can connect and post messages in
  real time. github
- Data-driven portfolio web application: Developed data-driven portfolio using Python with Django, Bootstrap and Postgresql. <u>github</u>
- Campground Reservation Application using React. React Native and Redux: Created web application using
  React for UI, Node.js for server and Redux for state management. The same web application was also rebuilt using
  React Native for use as a mobile application to use native device features such as local storage, secure store,
  notifications, camera and gestures. github
- **MERN Stack Contact Manager Application**: Created a single page contact manager web application (SPA) using React for UI, Express/Node.js for server, MongoDB for persistence and JWT for authentication. application allows users to register, login, view, add and modify their contacts. *github*
- **Product Recommendation System in Java**: As a hackathon project in Akamai, designed and developed Product Recommendation System which uses user-based collaborative filtering to understand existing customer product relationships and recommend new products to customers using Apache Mahout in Java.
- Android Application for Accessing Akamai Services: As a hackathon project, built a native Android app to provide a subset of functionalities from Akamai's portal. It takes authentication/authorization credentials from the user, makes REST requests to one of the available service endpoints, and displays the response to the user.

#### **AWARDS**

Best Technology Award, Brillio Hackathon project2022Akalades Award, Akamai Technologies2019

Was awarded an internal award towards my successful and effective contribution in moving to a new tool which helped in

timely deprecation of its legacy counterpart.			