

Vidhyasagar Harihara

<https://vidxyz.github.io> | Versatile engineer with a knack for learning and delivery | vdhysgr@gmail.com

SKILLS

PROGRAMMING LANGUAGES

- Scala • Elixir • Kotlin • Dart • Java
- Python • C++ • JavaScript • NodeJS
- HTML • CSS • jQuery • Swift • Bash

FRAMEWORKS

- Kubernetes • Play • Phoenix • Ktor • Spring
- Django • Akka • Express • Android SDK
- Flutter SDK • Swift SDK • Kafka • Swing
- Guice • Flask • Keras • Tensorflow

DATABASES

- PostgreSQL • MySQL • Athena • SQLite3
- Parse • Neo4J • MongoDB • Cassandra

TOOLS

- Terraform • Docker • KOPS • SOPS
- Kubectl • Git • CloudFormation • Elastic
- Grafana • Prometheus • Opensearch
- ArgoCD • Nginx • HAProxy

CLOUD TECHNOLOGIES

- AWS: S3, EC2, ECR, SQS, RDS, Athena, IAM, CloudWatch
- GCP: GCR, GCS, GKE, Pub/Sub, BigQuery, GCE
- Azure: AKS, AKV, VMSS, WAF, AAD

PROJECTS

FITCENTIVE

SCALA, ELIXIR, FLUTTER, TERRAFORM, KUBERNETES, GCP

Social fitness app aimed at helping you discover people with similar interests

CLUEIN

FLUTTER

Companion app to help you play the game "Clue". Available on iOS, Android and Web

SPACEJUNK

JAVA, XML, LIBGDX API

Platformer style Android game that allows you escape reality and shoot off into space. Available on both iOS and Android

EDUCATION

UNIVERSITY OF WATERLOO ONTARIO, CANADA

HONOURS COMPUTER SCIENCE

September 2013 - May 2018

Patent: Fraud Detection using Graph DBs

EXPERIENCE

IMPROVING, OTTAWA

SENIOR CONSULTANT, DEVOPS ENGINEER

May 2022 - Present | Toronto, ON

- Implemented **GitOps (CD)** with **ArgoCD** to configure **self-healing k8s manifests**
- Developed single sign-on **SSO** solutions for Prometheus, AlertManager, Opensearch, and Nexus using **OIDC, SAML and LDAP** with **Azure AD** integration
- Led the **migration** of distributed logging solution from Elasticsearch to **Opensearch** to handle **daily** ingestion of **50+ GBs** of logs using **Helm** charts and **Terraform**
- Established **CI/CD** pipelines with **semantic versioning** to deploy workloads on **AKS**
- Utilized **Terraform** extensively for **Azure** and **AKS cluster** resource management
- Introduced **kustomize** packages to streamline deployments to various environments
- Audited routes and designed rules to **secure** VPC networks using **Azure Firewall**
- Collaborated with various teams to perform frequent **production releases**

BILLIE APP

SENIOR FULL STACK ENGINEER

May 2021 - May 2022 | Toronto, ON

- Designed **Scala** based APIs for key features, including auth workflows with multiple **SSO** providers, exporting **user login data**, & applying **booking constraints** to spaces
- Implemented end-end features in **react/react-native** to render **user avatars** on building **floor plans**, create modals for **data exports** as well as integrate schedules into a **calendar-like** view
- **Integrated** in-app calendar info with user's **email** calendar using Outlook/Google **Calendar APIs** to ensure bidirectional **synchronization** of changes
- Configured log based **alerts** and published them to **Slack** channels via web hooks for easy **visibility** into cluster services
- Managed **infrastructure** in **GCP**, including maintaining **kubernetes manifests**, rotation of **SSL Certificates**, configuring **artifact managers**, self-hosting **Kafka clusters** as well as creating **CI/CD pipelines** in **GitLab** as required

ASKUITY INC, A DIVISION OF THE HOME DEPOT

SOFTWARE ENGINEER

July 2019 - May 2021 | Toronto, ON

- Designed and implemented a burstable **data-pipeline** on **EKS** with **Kotlin** and **Elixir** to operate on large POS datasets using **SQS** as the message broker
- Architected & implemented a database **schema** & **microservice** enabling users to create widgets displaying a variety of metrics
- Implemented an innovative solution using **Akka** streams to **precache** common user requests resulting in a **10x improvement** in response times
- Developed **REST/GraphQL** APIs for **data retrieval** & **authentication** in **Scala/Elixir**
- Established a staging environment on **AWS** for the development teams and configured **CI/CD pipelines** for automated **deployments** to **Kubernetes** clusters

CAPITAL ONE BANK, CANADA BRANCH

SOFTWARE ENGINEER

May 2017 - Dec 2017, May 2018 - Oct 2018 | Toronto, ON

- Developed a **patented algorithm** for real-time **fraud detection** using graph databases, saving approximately **\$250,000** in potential fraud losses
- Released **version 1.3** of the Capital One **Android** Beta app loaded with new features built from the ground up on the **play store** to an audience of over a **1000** people
- Utilized various **AWS technologies** like **Redshift, S3, & EC2**, by deploying infrastructure with **Terraform**
- Implemented insolvency workflow solutions via **Kafka** based **Spring microservices**