

# Vidhyasagar Harihara

<https://vidxyz.github.io> | Problem Solver, Tech Explorer, Software Engineer | [vdhysgr@gmail.com](mailto:vdhysgr@gmail.com)

## SKILLS

### PROGRAMMING LANGUAGES

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

### FRAMEWORKS

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

### DATABASES

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

### TOOLS

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

### 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

#### DEVOPS ENGINEER

May 2022 - Present | Toronto, ON

- Enabled **GitOps** CD using **ArgoCD** to configure **self-healing** kubernetes manifests
- Implemented **OIDC**, **SAML** and **LDAP** based **SSO** for Prometheus, AlertManager, Opensearch and Nexus using **Azure AD** as the identity provider
- Successfully **migrated** the team's distributed **logging solution** to ingest GBs of logs on a daily basis from Elasticsearch to **Opensearch** using **Helm** charts and **Terraform**
- Created shared **kustomize** packages to avoid code duplication across various repos
- Identified routes and designed rules to **secure** network access via **Azure Firewall**
- Worked extensively with **Terraform** to manage various **Azure** resources and **coordinated** with operations teams to perform scheduled **production releases**

### BILLIE APP

#### FULL STACK ENGINEER

May 2021 - May 2022 | Toronto, ON

- Designed **Scala** based APIs for key features, including exporting **user login data**, **reconfiguring** SSO providers & applying **constraints & schedules** to booking spaces
- Worked on variety of features in **react/react-native** such as rendering **user avatars** on building **floorplans**, creating modals for various **data exports** as well as integrating booking schedules into a **calendar-like** view
- Worked on **integrating** in-app calendar info with user's **email** calendar using Microsoft/Google **Calendar APIs** to propagate changes and maintain **sync**
- Configured log based **alerts** and published them to **Slack** channels via web hooks for easy **visibility** into cluster services
- Worked extensively on maintaining and upgrading the **GCP infrastructure**, including updating **SSL Certificates**, maintaining **kubernetes manifests**, configuring **Kafka** clusters as well as keeping **CI/CD pipelines** up to date

### ASKUITY INC, A DIVISION OF THE HOME DEPOT

#### SOFTWARE ENGINEER

July 2019 - May 2021 | Toronto, ON

- Designed and implemented a reliable and efficient **data-pipeline** in **Kotlin** and **Elixir** to perform **ETL** on large amounts of POS data
- Architected & implemented a database **schema** & **microservice** to allow users to create widgets with filters showing a variety of metrics
- Developed a novel solution to **precache** common user requests using **Akka** streams to **speed up response** times by **10x**
- Built **REST/GraphQL** APIs to retrieve data as well as perform authentication workflows in **Scala** & **Elixir**
- Created a staging environment on AWS for the development teams and set up **CI/CD pipelines** for automatic **deployment** of stable code to **kubernetes** clusters

### CAPITAL ONE BANK, CANADA BRANCH

#### SOFTWARE ENGINEER

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

- Saved roughly **\$250,000** in **potential fraud** losses by developing a **patented algorithm** for real-time **fraud detection** using graph databases
- 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
- Gained immense experience working with a variety of **AWS technologies**, including **Redshift**, **S3**, & **EC2**, through the deployment of infrastructure using **Terraform**
- Worked on **Kafka** based **Spring microservice** to add insolvency specific features