HRISHIKESH DILIP KULKARNI

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Education

Barchelor's in Information Technology **2016 - 2020**

- MIT College of Engineering (Savitribai Phule Pune University) | CGPA: 8.76/10

Skills

Programming Languages: C, C++, Python, Java, JavaScript, Shell scripting, Golang

Frameworks: Bootstrap, Django, Flask, Fast API, Expressjs, Reactjs, Nodejs

Databases: MySQL, MongoDB, SQLite, PostgreSQL

Cloud Technologies: Kubernetes, Docker, Openshift, IoT, Ansible, Grafana, Wily, Argocd

Work Experience

Barclays, Pune

- **Business Analyst – 4 (Infrastructure and Automation Engineer)** **Jan'23 – Present**
  - Designed and implemented ArgoCD-managed OpenShift clusters, including configurations for nginx, nexus, etcd, compute node, CNS, HAProxy, and ArgoCD for 8 production clusters.
  - Developed two web applications:
    i. Container Collab Bot: Built with Rasa, React.js, NLP, TensorFlow, and Flask, featuring over 250 FAQ responses and 15 automations which garnered over 15,000 users over the span of 2 years.
    ii. Decommission Portal: Built with React.js, Flask, and MongoDB that facilitated systematic decommissioning of 6000+ projects.
  - Created tools to improve internal processes:
    i. Telemetry: Monitors critical applications using JavaScript, Flask, and SQLite on our Openshift clusters.
    ii. SRE Application: Developed with React.js, MaterialUI, MongoDB for managing workloads and progress.
    iii. BCP Inventory: Consolidates openshift node data from 100+ clusters using Django, HTML, Bootstrap for comprehensive visibility.

- **Business Analyst – 3 (Senior Infrastructure Engineer)** **May'21 - Dec'22**
  - Increased cluster capacity by 45% by building 200+ nodes in the UK and US environments.
  - Participated in major production activities, including data-center resilience testing for 90,000 microservices.
  - Conducted knowledge transfer sessions for aPaaS and BCP customers and internal teams.

- **Business Analyst – 2 (Junior Infrastructure Engineer)** **Aug'20 - May'21**
  - Gained expertise in containerization technologies (Docker, Kubernetes, OpenShift) and managed 250 GAP (US) Projects. Developed a Python script that automated quota updates, saving 3 man-hours weekly.
  - Administered cluster monitoring with CA APM – Wily, resolving 300+ customer issues through JIRA and Change Requests.

Projects

- **Car-o-bar** [Javascript, J2EE, HTML, CSS, MYSQL]
  - Developed a web application for managing car servicing appointments using JavaScript, J2EE, HTML, CSS, and MySQL. Implemented a robust frontend with Bootstrap and designed backend batch jobs with Java to automate appointment updates.
- **PixPy** [TensorFlow, PyTorch, OpenCV, Numpy, Pandas, Pyttsx3]
  - Created an advanced image processing application with TensorFlow, PyTorch, OpenCV, and other libraries.
  - Achieved ~91% accuracy in text extraction and over 85% in object detection.
  - Integrated features for text-to-speech conversion for visually impaired users.
- **IoT Based Smart Irrigation** [Raspberry Pi Pico, LM 35 Temperature sensor, Humidity Sensor, GSM simcard, ADC]
  - Designed a smart irrigation system using Raspberry Pi Pico, LM35 temperature sensor, and GSM SIM card.
  - The project projected a crop growth by 10% and field outcome by 60% through real-time soil moisture and temperature monitoring.

Paper Publications

- PixPy – An Application for Image Processing: https://www.irjet.net/archives/V7/i6/IRJET-V7I6213.pdf
- IoT based Smart Farming: https://www.irjet.net/archives/V7/i4/IRJET-V7I4270.pdf
- Facial Expression Recognition: https://www.irjet.net/archives/V6/i11/IRJET-V6I11193.pdf