# Dharma Kevadiya | Software Engineer

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#### **SKILLS**

**Programming Language:** C, **C++**, Python, Java, JavaScript, TypeScript

**Frameworks:** TensorFlow, PyTorch, Spring Boot, JUnit, Mockito, Django, PyTest, React, Redux, NodeJS, Hibernate **Cloud Technologies:** AWS (Cognito, EC2, Lambda, S3, SageMaker, OpenSearch, DynamoDB, SQS/SNS), GCP (Pub/Sub/CloudRun)

**Embedded & Real-Time:** ARM Cortex-M, interrupt-driven drivers, RTOS, real-time processing

**DevOps Tools:** Docker, Kubernetes, GCP DevOps, GitHub Actions, CloudFormation, Splunk

Databases Systems: SQL (MySQL, RDS, Cloud SQL), NoSQL

(MongoDB, DynamoDB), PostgreSQL

 $\textbf{Project Management:} \ \mathsf{SDLC}, \ \mathsf{Agile}, \ \mathsf{Scrum}, \ \mathsf{JIRA}, \ \mathsf{Git}$ 

(GitHub, GitLab)

**Other:** Code Review, Postman, Linux (Ubuntu), Test Driven Development (TDD), Microservices, **Object-Oriented** 

Software, Visual Studio Code.

### **EXPERIENCE**

## HireUp Tech Careers, India

, Jan 2024 - Dec 2024

Software Engineer

- Wrote unit tests for existing C++ sensor drivers using Google Test framework on STM32F407 development board. Fixed 3 memory leak bugs and improved test coverage from 65% to 78% under senior developer guidance.
- Assisted with Ethernet packet debugging using **Wireshark** to analyze MPLS traffic patterns. **Documented 15 network anomalies** and helped validate packet parser fixes in the lab environment.
- Added automated test scripts to existing **GitLab CI** pipeline for sensor data validation. Reduced manual testing time for release cycle through **pytest automation** scripts.
- Performed load testing on **TensorFlow** inference service in development environment. Identified performance bottleneck in data preprocessing that senior team optimized for **8% improvement**.

### Mobilix Solutions, India

, Jun 2022 - Dec 2022

Software Engineer Intern

- Contributed to **Do Teen Panch (Android game; 10k+ installs)** by delivering scoped features across the **Java REST backend** and **TypeScript UI**, ensuring reliable functionality and user experience.
- Developed and tested **list/detail endpoints with pagination** for the "**Chip for Sale**" storefront under mentor guidance, while reviewing technical design notes to align with best practices.
- Constructed and integrated **TypeScript UI components** per product specifications, actively engaging in **Agile routines** (standups, sprint planning, peer code reviews) and managing version control through **Git**.

# **PROJECTS**

## BugBoard | Collaborative bug tracking & live-debugging platform | Github

Tools: React + Spring Boot, MySQL, Docker, GitLab (story points, planned sprint work), **Designite**, **JUnit**, Autoprefixer, Playwright.

- Built React + Spring Boot app with a real-time Monaco editor (Firebase RTDB); delivered REST APIs in **Agile/TDD with 86% JUnit coverage**; fixed **30+ code smells** (Designite, SOLID); ensured cross-browser support (Autoprefixer, validated with Playwright).
- Set up a simple **GitLab CI/CD pipeline** that builds the app, runs tests, publishes a **Docker** image, and deploys on university VM.

# Knowledge Distillation | Adaptive CIFAR-10 Distillation Pipeline | Github

Tools: Python, PyTorch, Image Classification, Tqdm, Scikit-learn.

- Distilled CIFAR-10 knowledge from **ResNet-18** to a 5-layer CNN using **CE+KD+hint losses** and an adaptive β schedule, boosting **accuracy by 7.3%**.
- Employed activation-variance selective hinting and 1×1 projections in a checkpointed pipeline to cut **memory use by 60%** with stable convergence.

# Medilink | Telehealth Video Call Platform | Github

Tools: Node.js, React/Express, Twilio Video, JWT, OWASP ZAP, JMeter, MongoDB, GitHub.

- Built secure, **tokenized** video rooms with **role-based** links, waiting room, and in-call controls; doctor-only record uploads and nearby-pharmacy finder.
- Turn requirements into functional specs, documented components in **Swagger**, ran OWASP ZAP (security) and **JMeter performance tests for 500+ concurrent users**, and did basic cross-browser validation (**Agile**; code reviews with Teaching Assistance).

# Multimodal Assistant Chat | AI-Powered Platform | Github

**Tools:** React, TypeScript, **Next.js**, OpenAI Assistants API, Python (FastAPI, Pandas), AWS (Cognito, Lambda, S3, CloudFormation), Splunk, Selenium, VMware.

- Made a multimodal chat platform with AI-driven **file analysis**, vision support, and Python **microservices** for data insights, deployed on AWS with automated infra provisioning and **Splunk**-based monitoring.
- Automated **UI testing** with **Selenium** and validated production-ready deployments in **VMware** lab environments for scalability and fault tolerance.

## **EDUCATION**