Leo Kamino

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Software engineer with experience in full-stack development, software testing, and software automation. Skilled in building scalable applications using JavaScript/Typescript, Python, Ruby, and Java, with a strong understanding of API development, databases, and cloud technologies.

Adept at translating user requirements into technical implementations. Experienced in Agile development, CI/CD integration, test-driven development, and automated testing to ensure high-quality software solutions.

PROFESSIONAL EXPERIENCE

UBC APPLIED SCIENCE DEAN'S OFFICE Work Learn Program - Web Developer

Vancouver, BC 2021-Present

- Led maintenance and optimization of UBC Applied Science websites, with 6,000+ weekly visitors, ensuring seamless performance.
- Built custom Drupal modules in **PHP** to implement site-specific functionality.
- Created a scalable **Sass-based design system** to ensure consistent and modern UI/UX across all UBC Engineering websites.
- Developed dynamic UI components using Twig, JavaScript, and TailwindCSS.
- Delivered custom websites for research groups and engineering teams, aligning with stakeholder requirements.
- Improved SEO scores by 20%, from 75% to 95+, through strategic optimizations.

MOTOROLA SOLUTIONS

Vancouver, BC

Software Engineer Intern

May - Sep, 2024

Jan - Sep, 2023

- Front-end Software Engineer Co-op
 - Designed and debugged scalable features using **Ruby on Rails** and **React**.
 - Developed an automated Selenium web scraper for broken link detection and HTML integrating automatic alerts using Atlassian Bamboo CI.
 - Built **RSpec** and **React Testing Library** suites to improve code reliability.
 - Performed end-to-end, functional, and exploratory testing, addressing critical bugs for high-quality releases.

UBC COMPUTER ENGINEERING DEPARTMENT

Vancouver, BC

Teaching Assistant - Software Construction

Sep-Dec, 2023

- Led weekly labs for 40+ students, provided one-on-one support during office hours, and graded assignments.
- Taught concepts of object-oriented programming using Java.

CHANCE HEALTHCARE

Vancouver, BC May-Dec, 2022

Software Engineer Co-op

Enhanced an internal web tool using **Angular** and **.NET**, semi-automating packaging of new update releases to

- streamline the creation and availability of medical device software patches.
- Performed rigorous sanity testing on medical device software patches, ensuring compliance with strict quality standards.

EDUCATION

UNIVERSITY OF BRITISH COLUMBIA

Vancouver, BC

BASc in Computer Engineering

2020-2025

GPA: 90/100

Activities: Teaching Assistant (Software construction), Work Learn, and Launchpad Design Team Academic Recognition: Dean's Honour List, Trek Excellence Scholarship (Top 5% within cohort)

DISTRIBUTED KEY-VALUE STORE

Java, Distributed Systems, AWS EC2, Terraform

- Designed and implemented a scalable **distributed key-value store** using **consistent hashing** for efficient load balancing and fault tolerance.
- Developed a **group membership** service using an **epidemic protocol** to manage node failures and maintain a dynamic cluster.
- Deployed the system on **AWS EC2** using **Terraform** for cloud management infrastructure, leveraging network emulation to test robustness under high latency and packet loss.

EMERGENCY AI RESPONSE SYSTEM

FastAPI (Python), React, Next.Js, Docker, MongoDB, Docker

Capstone project in collaboration with TELUS.

- Designed a real-time AI-driven system to classify the priority of 911 calls to improve emergency response efficiency.
- Developed speech diarization with **Whisper** transcription and LLM-based speaker ID to isolate caller audio for ML training.
- Created a **Docker** container to deploy AI-powered back-end services.
- Implemented live audio recording and real-time transmission to a **FastAPI backend** using **WebSockets**, enabling seamless **real-time processing** of 911 calls for priority classification.

LANGSYNC

Java Android, Node.Js, OpenAI API, mongoose, Azure

1st Place in CPEN 321 - Software Engineering project competition.

- Led a team of 4, taking ownership of architecture design to build a match-making **Android app** for language learners
- Developed core features: recommendation algorithm, Google OAuth2 authentication, Calendar integration, and video calling.
- Integrated **OpenAI API** to provide grammar suggestions during live messaging

ENHANCED UDP FILE TRANSFER

C, Socket Programming, Network Protocol Design

- Designed and implemented a reliable data transmission protocol over **UDP** using packet acknowledgment (ACK), retransmissions, and sequence numbering in **C**.
- Developed timeout and retransmission mechanisms, achieving 83.32% bandwidth utilization.
- Implemented packet sequence numbering to ensure ordered data delivery and checksum to prevent data corruption.
- Optimized bandwidth utilization and throughput efficiency, reaching **17.47 Mb/s throughput on a 20 Mbit/s link**, surpassing the 70% bandwidth requirement.

SKILLS

Programming Languages: Python, JavaScript, Ruby, Java

Web Development: React, Next.js, Typescript, HTML5, CSS, Sass, Bootstrap, TailwindCSS

Back-end Development: Node.js, FastAPI, Express.js, Ruby on Rails, SQL (MySQL), NoSQL (MongoDB)

DevOps and Cloud Tools: Git, GitHub Actions, Atlassian Bamboo, Docker, Jira, AWS, Terraform

Software Methodologies: Agile/Scrum, Test-Driven Development (TDD), Continuous Integration/Continuous Deployment (CI/CD)

RELEVANT COURSEWORK

Software Testing - CPEN 422

Introduction to Cybersecurity - CPEN 442

Computer Networks - ELEC331

Algorithm Design and Analysis - CPSC 320

Design of Distributed Systems - CPEN 431

Software Engineering - CPEN 321 Relational Databases - CPSC 304

Applied Machine Learning - CPSC 330