Mizuki Hikaru

Software Engineer • Sydney, Australia • mizuki@hikaru.org • LinkedIn

Summary

Professional Software Developer with 12+ years of experience in designing software applications, and implementing complex features and user interfaces across diverse domains like supply chain logistics, real estate, and cybersecurity. Architected scalable and secure web applications, led cross-functional development teams, resolved bugs, leveraged coding best practices, and optimized system performance for enhanced user experience and operational efficiency. Knowledgeable with multiple programming languages and frameworks. Worked in teams of up to 7 people, on software ranging from serving 3k users per month up to 100k active users per month. Works with AI to attain modern efficiency standards.

Core Competencies

Software Development Lifecycle (SLDC) Full Stack Development Software Design & Architecture Object-Oriented Programming (OOP) Clean Code & Maintainability Agile Development Methodologies Microservice Architecture Progressive Web Apps (PWA) Framework Design & Prototyping Code Quality UI/UX Design Testing & Debugging Unit Testing & Test-Driven Development (TDD) API Design & Integration CI/CD Pipelines & Infrastructure Automation Project Management Information Security Performance Optimization

Technical Skills

Python JavaScript TypeScript PHP Elixir C++ PostgreSQL NoSQL (Redis) HTML CSS Django Flask FastAPI Node.js React.js jQuery Django REST Framework CI/CD AWS GCP Git GitLab GitHub Docker Raspberry Pi Selenium SMTP DKIM Nginx SEO Oban Amazon S3 Blockchain Ecto Progressive Web Apps

Professional Experience

Security Engineering Support Engineer — *TikTok - US Data Security*   Sydney, Australia • November 2024 - present
- Triaged and provided support for on-call tickets spanning 5 different platforms.
- Gained experience with analytics platforms such as Grafana.
- Deployed cloud services in a complex environment for the purpose of gaining end-to-end experience with internal systems and collecting metrics of the other platforms we use.

Senior Software Engineer — *Tesserent - Cyber Solutions by Thales*   Melbourne, Australia • April 2023 - April 2024
- Designed and implemented backend Python code for a scalable AVD provisioning server, enabling automated deployment of 50 virtual Android devices monthly during testing.
- Reduced provisioning creation time by 67% while optimizing the process from 6 minutes to just 2 minutes.
- Implemented Django code to power the backend web application server and employed React to improve UI that enhanced overall user interaction with the provisioning platform.
- Identified and resolved bugs while implementing large features to ensure platform stability and code quality for at least 50 different features.

Senior Software Engineer — *Distru (Supply Chain & Logistics)*   Remote • January 2022 - June 2022
- Designed and integrated large-scale features and a user-friendly interface for the supply chain logistics application by leveraging Elixir for backend development, TypeScript, and React for frontend for at least 30 different features or issues.
- Boosted the rate-limited API layer efficiency, improving both memory consumption and CPU utilization by up to 200%.
- Engineered large-scale code refactoring within the Elixir codebase while ensuring maintainability and scalability for future growth. Influenced an Elixir codebase that interacted with a PostgreSQL database using the Ecto ORM.
- Executed job processing through the Oban job processor to optimize workflow efficiency by up to 200%.

Senior Software Engineer — *Luxury Escapes*   Sydney, Australia • November 2020 - December 2021
- Co-ordinated the Search API, focusing on improving geolocation search functionalities for properties by employing JavaScript for backend and frontend development, React for the frontend UI, Redis and PostgreSQL databases for data integrity.
- Applied new features, and SEO practices, updated sitemaps, and resolved bugs within the search microservice to improve search engine ranking of the real estate listings, leading to an increase in organic traffic by at least 5%.

Senior Software Engineer — *Zero Associates*   Melbourne, Australia • January 2019 - July 2020
- Incorporated Python, Selenium, and Bitcoin daemon to create a proof-of-concept proxy for purchasing items on Amazon with Bitcoin over 8 months.
- Built and configured a standalone mail server on a Raspberry Pi, incorporating SMTP and DKIM for secure email delivery over 9 months.

Senior Software Engineer — *Loki Network*   Melbourne, Australia • February 2018 - August 2018
- Influenced the local fork of the Monero codebase by integrating specific modifications using C++ developed by the Loki Network to enable incentivized mix network functionality, now used by over 100000 users monthly.

- Progressed to a team lead position and led a small team of 2 in implementing the core blockchain infrastructure.
- Interviewed candidates and hired new talent, fostering a strong development team of 5 people.
- Translated technical details and project requirements between developers and higher management while communicating blockers to 3 stakeholders and deadlines to 5 team members, ensuring project transparency and progress.

Senior Software Engineer — *B2BPay*　　　　　　　　　　　Berlin, Germany • May 2017 - July 2017
- Built backend systems by leveraging JavaScript for backend functionalities, including the creation of APIs and handling of transaction processing.

Traveller — *Professional Career Break*　　　　　　　　Around the world • June 2015 - May 2017
- Took a career break to travel the world for two years, gaining diverse cultural insights, and enhancing global awareness.

Software Engineer — *Facebook*　　　　　　　Menlo Park, California, USA • August 2014 - June 2015
- Facilitated the capacity planning team in developing internal software to upgrade data center and network resource allocation.
- Helped those planning rack allocation in new data centers through collaborative team efforts while developing front-end applications using JavaScript, and back-end services with PHP and Python.

Software Engineer — *Eudaemonia Research*　　　　　　Sydney, Australia • March 2014 - July 2014
- Engaged in innovative research, development, and foundation of decentralized exchange (DEX) technology before widespread adoption.

Security Software Engineer — *Atlassian*　　　　　　Sydney, Australia • January 2014 - March 2014
- Enhanced Software Security by engineering internal software security auditing products written in Python.
- Scanned codebases for exploitable vulnerabilities, improving overall application security posture.

Software Engineer — *Climate Change Research Centre at UNSW*　　Sydney, Australia • January 2013 - September 2013
- Developed an interactive website using Python and JavaScript to raise awareness about plastic pollution, now seen by at least 3000 visitors each month.
- Leveraged climate change research models to calculate the probable destination of plastic debris in the ocean, allowing users to visualize potential environmental impact.

Intern Software Engineer — *Azimuth Security*　　　　Lane Cove, NSW, Australia • February 2012 - April 2012
- Gained valuable hands-on experience developing software security tools during an internship while utilizing C++.

Penetration Tester — *Securus Global*　　　　　　Sydney, Australia • October 2011 - January 2012
- Improved software security by conducting penetration testing engagements for the identification of security vulnerabilities within the client software.
- Generated comprehensive reports outlining the discovered vulnerabilities, potential impact, and recommended risk mitigation strategies.

Intern Software Engineer — *Google*　　　　　　　Sydney, Australia • January 2010 - March 2010
- Added business' logos to Google Maps, C++ in the backend and JavaScript in the frontend.

Education

Bachelor of Science (BS) in Computer Science — *University of New South Wales*　　February 2009 - March 2014

Awards

- CSE undergraduate performance award for years 1,2, & 3 at UNSW
- Macquarie & Microsoft performance award for year 2 & 3 at UNSW
- International Olympiad in Informatics Gold Medalist in August 2008