Andreas Alexander

Jakarta | +62 878 7819 7989 | drealexander.dev@gmail.com | linkedin.com/in/vincentius-andreas-alexander

ABOUT ME

Engineer who owns the full engagement lifecycle, from understanding client problems to designing, demoing, and delivering solutions users actually adopt. I build software that creates real impact: GIS and geospatial intelligence platforms driving retail and government decision-making, investment features used by millions on e-commerce, and operational systems that replace manual workflows for growing businesses. I bridge the technical and the practical fluently, hands-on implementing SuperMap and ESRI GIS platforms, CI/CD deployment pipelines, and cloud infrastructure on Alibaba Cloud for production client environments. Backed by a strong security mindset and published CVE research, I thrive where technical delivery and business outcomes go hand in hand.

RELEVANT WORKING EXPERIENCE

Secure Pasifik Teknologi — Jakarta

System Engineer (Seciron MAST & OpenText Fortify) · *August 2024 – Current*

- Integrated OpenText Fortify SAST and DAST scans into client CI/CD pipelines, scripting automated security checks that validate each build before release.
- Delivered solution overview presentations to clients and partners, explaining application security capabilities in both technical and business terms.
- Conducted product demonstrations and hands-on walkthroughs for stakeholders, validating results against their requirements and gathering feedback.
- Documented the end-to-end implementation of a mobile application security project for a government institution.
- Provided technical support during the maintenance period, troubleshooting and resolving platform issues for users.
- Developed project plans and timelines for implementation engagements, defining milestones and deliverables to keep deployments on schedule.

Blue Power Technology (CTI Group) — Jakarta

Software Developer, GIS (SuperMap & ESRI Platform) · *October 2024 – July 2026*

- Build and ship SuperMap and ESRI-based GIS applications end-to-end for retail and government clients, translating user needs into reliable, map-driven products.
- Own full-lifecycle project delivery: gather requirements, define project timelines and Statements of Work (SOW), conduct solution demos, facilitate User Acceptance Testing (UAT), and elaborate in knowledge transfer sessions for user handover.
- Elaborate in post-sales implementation activities including platform installation, infrastructure sizing, CI/CD pipeline setup for production deployment, and ongoing maintenance.
- Own end-to-end maintenance for government GIS applications generating IDR 750 million in revenue: triage and fix defects, manage license expansions, drive codebase remediation, write technical documentation, and elaborate in internal knowledge-sharing to upskill the team.

- Developed a geospatial portal for a government intelligence agency (IDR 300 million revenue) using Node.js and Python, integrating spatial data from heterogeneous sources, including Esri ArcMap and Eternix Blaze Terra into a unified platform with a project/data catalog, daily data gallery for weekly picket schedules, and a quick-access hub for ArcGIS and Blaze Terra tools.
- Develop location-intelligence solutions that turn geospatial data into decisions, covering site selection, coverage analysis, and regional insights.
- Deliver mobile logistics tools for on-premise vehicle navigation and fleet efficiency within private facilities.

Levels Living — Singapore

Software Developer · *March 2024 – May 2024*

- Built an internal e-commerce operations portal that gives the team a single interface to manage product listings and track orders across e-commerce storefronts, eliminating the need to switch between platforms manually.
- Designed the system to consolidate multi-channel order fulfillment into one unified view, reducing operational overhead and the risk of missed or duplicated orders across sales channels.
- Delivered the portal as a fully production-ready system with secure VPS hosting, SSL encryption, and scalable frontend deployment which was built to support the team's long-term growth without requiring infrastructure changes.

Blibli.com — Jakarta

iOS Developer · *February 2023 – February 2024*

- Extended Blibli's in-app financial investment feature, enabling millions of active users to invest in digital gold and reksa dana directly within the Blibli iOS app that deepened the platform's role beyond e-commerce into everyday personal finance.
- Researched and developed an internal CoreML-powered tool to automatically detect and remove duplicate and unused image assets across the codebase, reducing app bloat and improving the development team's asset management workflow.

Binus University — Jakarta

Laboratory Assistant · *August 2021 – February 2022*

- Guided undergraduate students through foundational programming concepts in C and object-oriented design principles through Framework Layer Architecture (FLA) in Java language, helping build their core engineering mindset.
- Designed examination cases for SQL and Data Structure modules, and evaluated student submissions for the FLA course directly contributing to the academic assessment quality for 30+ students.

EDUCATION

Binus University

Bachelor of Computer Science · *September 2020 – November 2024*

- Graduated with a 3.76 GPA (Magna Cum Laude).
- Thesis: Quan C — Development of a Secure Programming Learning Platform, an interactive application that trains developers to write more secure code through hands-on vulnerability challenges.

- Active member of Himpunan Mahasiswa Teknik Informatika (HIMTI), the Informatics Engineering student association for 1 year.
- Served as a Freshmen Leader, mentoring and guiding new students during their transition into university.

PROJECTS

ESRI GIS Project

Government Agency (Confidential) · March 2026

- Collaborated with end users through partner Argapana to gather and analyze requirements, mapping business processes and identifying key pain points.
- Designed tailored solution architectures aligned with user requirements and operational workflows.
- Developed an Intelligence Geographical Information System (IGIS) with a Python FastAPI backend and ReactJS frontend, integrated with the ESRI GIS platform.
- Conducted solution demonstrations and walkthroughs for stakeholders to validate outcomes and gather feedback.

Supermap GIS Project

Government Agency (Confidential) · July 2025

- Conducting SuperMap GIS solution POC to stakeholders through partner Visindo Prima Nusantara (VPN).
- Gathered and analyzed user requirements to define project scope aligned with business needs.
- Developed the project timeline and Statement of Work (SOW) to establish clear deliverables and milestones.
- Elaborated in post-sales activities, including SuperMap platform installation, system remediation, and environment setup.
- Set up CI/CD pipelines to automate deployment to the production server.
- Conducted solution demonstrations to validate features against user requirements.
- Prepared implementation progress reports and facilitated User Acceptance Testing (UAT) with stakeholders.
- Delivered knowledge transfer sessions to ensure smooth handover and user adoption.

Security Awareness Platform Project

Banking (Confidential) · July 2024

- Developed the frontend of a phishing simulation platform for a banking client using ReactJS, with a Python backend, to support internal security awareness training.
- Built interactive simulation interfaces that replicated realistic phishing scenarios to test employee awareness and identify susceptible users.
- Delivered a solution that successfully flagged employees who fell for simulated phishing attempts, providing the client with actionable insight for targeted security training.

Common Vulnerabilities and Exposures (CVE)

CVE-2023-45996 · October 2023 · Severity: HIGH (8.8)

- Discovered and reported a SQL injection vulnerability (CWE-89) in Senayan Library Management System (SLiMS) v9 and Bulian v9.6.1, an open-source library management platform.
- Identified that the reborrowLimit parameter in member_type.php was improperly sanitized, allowing a remote authenticated attacker to inject crafted SQL queries.

- Demonstrated that the flaw could be exploited to extract sensitive database information and achieve arbitrary code execution, using Burp Suite to intercept, craft, and validate malicious payloads.
- Responsibly disclosed the finding, which was assigned CVE-2023-45996 and published in the NIST National Vulnerability Database (NVD).

Quan C — Secure Coding Learning Platform

https://github.com/ProjectQuanC/quan-c-app/ · July 2024

- Designed and developed Quan C, a secure coding learning platform that trains developers to write more secure code through hands-on, gamified vulnerability challenges, as my undergraduate thesis project.
- Built an automated challenge validation engine ("DAST-like") that executes user-submitted code and tests it against pre-configured payloads to verify whether a solution correctly remediates the target vulnerability.
- Implemented core platform features including the secure coding challenge system, real-time leaderboards ranking users by solve speed, and an admin panel for creating and managing challenges.
- Delivered the full stack independently using React and TypeScript on the frontend, Node.js/Express, and Python/FastAPI on the backend, containerized with Docker for self-hosted deployment on Microsoft Azure Cloud.

RELEVANT CERTIFICATIONS

An Introduction of DevOps

Alibaba Cloud · June 2026

Operate and Manage a Cloud Server

Alibaba Cloud · February 2026

Supermap Junior WebGIS Engineer

Supermap · September 2025

Vulcanus: Secure Programming and Offensive code review course

Hackrocks · September 2024