

Dilanga Algama

Enterprise Software Engineer | Full-Stack Developer | AI Solutions

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PROFESSIONAL SUMMARY

Enterprise Software Engineer with 5+ years of experience designing, developing, deploying, and supporting enterprise applications for the University of Ottawa Faculty of Medicine. Strong background building full-stack systems across Elentra ME, UGME Admissions, and ElentraUO Mobile, including medical education workflows, admissions review and interview tools, assessment-related features, reporting, PDF generation, mobile delivery, and production support.

Experienced across PHP, Laravel, Vue.js, JavaScript, MySQL, MariaDB, REST APIs, GraphQL, React Native, Expo, and AI-enabled workflow automation. Known for owning complex software delivery across requirements, implementation, QA support, release coordination, production troubleshooting, documentation, and long-term maintainability.

CORE COMPETENCIES

Languages: PHP, JavaScript, Python, Java, C#, C++, Go, SQL, Shell

Frameworks: Laravel, Vue.js, React, React Native, Expo, jQuery, Twig

Web & APIs: REST APIs, GraphQL, HTML5, CSS3, SASS, AJAX, Node.js

Databases: MySQL, MariaDB, PostgreSQL, Microsoft SQL Server

DevOps & Infrastructure: Linux, Docker, GitLab CI/CD, GitHub, Apache, Production Deployments, Server Migrations

AI & Automation: OpenAI APIs, Deepgram, Prompt Engineering, Workflow Automation, AI-Assisted Development

Practices: Agile, Scrum, Testing, Troubleshooting, Documentation, Release Management, WCAG, AODA

PROFESSIONAL EXPERIENCE

University of Ottawa – Faculty of Medicine

Ottawa, ON

Software Developer

July 2021 – Present

- Delivered full-stack enterprise application features across Elentra ME, UGME Admissions, and ElentraUO Mobile, supporting medical education, admissions, assessment, reporting, production support, and mobile delivery.
- Built end-to-end UGME Admissions workflows for file review and interviews, replacing manual spreadsheet- and email-heavy processes with role-based, auditable web applications for admissions administrators, reviewers, and interviewers.
- Designed and implemented configurable file-review functionality including reader types, rubrics, scoring values, reviewer assignments, applicant grouping, flags, review statuses, and score export reports.
- Developed the admissions interview module with candidate management, interviewer assignment, bilingual evaluation forms, autosave, validation, flagging, PDF generation, completed-form protections, and consolidated score reporting.
- Improved operational safety and data integrity across admissions workflows through transactional backend updates, authenticated per-user access, stale-score cleanup, assignment safeguards, and protections against removing users with completed or in-progress work.
- Served as the sole uOttawa developer responsible for adapting, maintaining, and releasing ElentraUO Mobile, transforming the upstream Elentra mobile platform into a branded, production-ready university app with custom app identity, Expo/EAS configuration, Android/iOS build settings, and release support.
- Modernized and stabilized ElentraUO Mobile through Expo/React Native upgrades, Android compatibility updates, and fixes across login, notices, calendar handling, assessments, EPA/CBE forms, backend response parsing, and release stability.
- Collaborated with product owners, QA analysts, admissions administrators, faculty stakeholders, and infrastructure teams to translate business requirements into production-ready software across development, QA, and production environments.

Euroshine

Generative AI Analyst / Web Developer

Ottawa, ON

Sept. 2022 – Present

- Develop AI-powered workflow automation, customer service, and business process improvement solutions using web technologies, AI tools, and process documentation.
- Build and maintain digital systems supporting customer engagement, operational efficiency, website functionality, service workflows, and internal process improvements.
- Implement AI-assisted customer support and automation concepts to reduce repetitive manual work and improve response consistency for business operations.
- Create documentation, training materials, and workflow guides to support adoption of AI-enabled tools, web systems, and process improvements.

University of Ottawa – Web Services Team

Junior Web Developer

Ottawa, ON

May 2019 – May 2021

- Developed and maintained university websites and web applications using Drupal, PHP, JavaScript, Twig, HTML, and CSS.
- Implemented accessibility improvements in accordance with AODA and WCAG standards to improve usability across university web properties.
- Collaborated with stakeholders to gather requirements, deliver website enhancements, troubleshoot defects, and support content contributors.
- Delivered training and support to university webmasters and content owners on platform usage, content management, and accessibility practices.

PROJECTS

Notivox – Real-Time Multilingual Meeting Assistant | *Electron, React, Python*

2025 – Present

- Building a cross-platform desktop and web application for real-time meeting transcription, translation, and AI-generated meeting summaries across multiple languages.
- Designed an event-driven architecture with REST APIs to stream speech-to-text data, process meeting content, store meeting archives, and generate structured summaries.
- Integrated AI and speech-to-text services including OpenAI and Deepgram to support automated note generation, multilingual processing, and workflow automation.

AI-Based Neural Information Retrieval System | *Python, NLP, X API*

2025

- Developed a retrieval system that ranks live X posts against user queries using TF-IDF, cosine similarity, query expansion, and NLP preprocessing techniques.
- Built a data pipeline to fetch, clean, index, and rank social media content through a query interface for real-time information retrieval experimentation.

Customer Experience Optimization App | *JavaScript, PHP, AI Chat Integration*

2024 – 2025

- Created a client-facing web application with AI-assisted customer chat, service automation, and workflow improvements for customer engagement.
- Instrumented service flows and applied iterative improvements to streamline request handling, improve response consistency, and support operational efficiency.

EDUCATION

University of Ottawa

Bachelor of Science, Honours in Computer Science; Minor in Management

Ottawa, ON

Graduated June 2021

- Academic focus included software engineering, databases, information retrieval, artificial intelligence, machine learning, and client/server architecture.

CERTIFICATIONS

Professional Scrum Master I (PSM I), Scrum.org – Aug. 2025

Professional Scrum Developer I (PSD I), Scrum.org – Jul. 2025

Generative AI Mastermind, Outskill – Oct. 2025

Java Certification: Algorithm Design, Abstraction, Testing & Debugging – Jul. 2021

AI/ML Coursework, Coursera / DeepLearning.AI – Aug. 2025 – Present