

RAFLI ARRASYID

EDUCATIONAL TECHNOLOGY | FULL-STACK DEVELOPMENT | LEARNING ANALYTICS

Padang Panjang, West Sumatra, Indonesia | rafly111104@gmail.com | +62 812-3479-5656

[Portfolio](#) | [LinkedIn](#) | [GitHub](#)

SUMMARY

Educational technology researcher and full-stack developer working at the intersection of learning systems, data, and software. Currently pursuing a Master of Education in Technical and Vocational Education and a Bachelor of Education in Information Systems and Technology Education at Universitas Pendidikan Indonesia. Experience spans funded research, undergraduate teaching support, LMS and analytics prototype development, and project-based web delivery. Peer-reviewed work covers process-visible learning systems, learning analytics, and privacy-preserving federated learning.

CORE SKILLS

Software Engineering: JavaScript, TypeScript, React, Node.js/Express, PHP/Laravel, SQL, REST-style web services, Tailwind CSS, responsive interface development

Data & Analytics: Python, Jupyter Notebook, SQL, data modeling, Chart.js, dashboard design, analytical reporting

Learning Systems: Learning analytics, learning-system design, accessible interaction, technology-supported vocational and nonformal education

Research & Delivery: Systematic literature review, literature-informed design, academic writing, requirements/process/data modeling, Git/GitHub, Vercel, stakeholder communication

EDUCATION

Master of Education in Technical and Vocational Education

2026 - Present

Universitas Pendidikan Indonesia | Bandung, Indonesia | Currently enrolled

Bachelor of Education in Information Systems and Technology Education

Aug 2023 - Present

Universitas Pendidikan Indonesia | Purwakarta, West Java, Indonesia | Currently enrolled

PROFESSIONAL EXPERIENCE

Teaching Assistant | Universitas Pendidikan Indonesia

Mar 2026 - Jun 2026

Purwakarta, West Java, Indonesia

- Supported two undergraduate courses - Information Systems Analysis and Design and Enterprise Governance - through consultations, assignment guidance, discussions, and learning coordination.
- Guided students in requirements analysis, process and data modeling, system design, and enterprise-governance concepts.

Freelance Full-Stack Developer | Project-Based

2023 - Present

Indonesia

- Deliver dashboards, e-commerce features, LMS prototypes, microsites, and data-driven web applications from requirements analysis through deployment.
- Build responsive interfaces and backend services using React, Tailwind CSS, Node.js/Express, SQL, and related web technologies; manage source control and production deployment through GitHub and Vercel.

RESEARCH EXPERIENCE

Student Researcher | SustainEdTech Lab, Universitas Pendidikan Indonesia

2026 | 8-month project

Research Grant for QS Ranking (RQS)

- Selected as one of six student researchers in an IDR 75,000,000 project developing an inclusive learning system for green skills and future-workforce readiness in community learning centers (PKBM).
- Contribute to multidisciplinary education-and-technology research involving PT Tera Data Indonusa Tbk. and Universiti Pendidikan Sultan Idris, Malaysia, aligned with SDG 4 and SDG 17.

Student Researcher | SustainEdTech Lab, Universitas Pendidikan Indonesia

2026 | 8-month project

Research Group Development Program

- Selected as one of five student researchers in an IDR 40,000,000 project developing the web-based EcoGrow Learning model for deep-learning implementation and school food resilience.
- Participate in an international education, technology, and sustainability initiative with Instituto Catolico Para A Formacao De Professores, Timor-Leste, aligned with SDG 4 and SDG 17.

PUBLICATIONS

• **Arrasyid, R.**, & Ananda Syifa, N. (2026). Systematic Review Of Privacy-Preserving Federated Learning: Methods, Architectures, Performance, And Challenges. *INTEGRATED (Journal of Information Technology and Vocational Education)*, 8(1).
<https://doi.org/10.17509/integrated.v8i1.130>

• **Arrasyid, R.**, & Abdul Majid, N. W. (2026). ThinkDeeper Web Coach: A Literature-Informed Design Specification for Process-Visible Reasoning in Problem-Solving-Intensive Information Technology Courses. *Teknika*, 15(2), 370-379.
<https://doi.org/10.34148/teknika.v15i2.1504>

• Romdhoni, R. D., **Arrasyid, R.**, Widodo, S., & Elviani, U. (2025). AI-Driven Learning Analytics for Self-Regulated and Metacognitive Learning: A Systematic Review. *Intellect: Indonesian Journal of Learning and Technological Innovation*, 4(2), 329-347.
<https://doi.org/10.57255/intellect.v4i02.1657>

SELECTED PROJECTS

- LENTERA** | [Live Demo](#) · EdTech LMS · Product design & full-stack
- Designed and developed a mobile-friendly learning environment for Indonesia's equivalency-education context, connecting structured pathways, interactive chapters, practice, assessment, reflection, tutor support, and progress tracking.
 - The current prototype focuses on Paket A across Phases A-C (Grades 1-6) and uses learning analytics as decision support rather than as a determinant of academic completion.
- ThinkDeeper Web Coach** | [Live Demo](#) · EdTech research prototype · Research & product
- Designed a literature-informed coaching and learning-analytics prototype for problem-solving-intensive IT courses that guides students through Clarify-Reason-Verify before direct solution support.
 - Integrated an Answer Delay Gate, discourse-based cognitive analytics, learning circles, personalized exercises, and lecturer dashboards to make evidence of student reasoning visible; further evaluation remains required.
- Nanasu E-Commerce** | [Live Demo](#) · Local e-commerce · Project lead & full-stack
- Led development of an e-commerce course project connecting Subang pineapple products with customers through a clear product and purchasing journey.
 - Coordinated planning, iterative implementation, team collaboration, and final delivery using Extreme Programming practices.
- Learning Analytics Dashboard** | [Live Demo](#) · Analytics prototype · End-to-end data analysis
- Developed an LMS analytics prototype that transforms learning-activity data into actionable insights on participation, reciprocity, contribution quality, and 21st-century competencies.
 - Combined dashboards, light gamification, and responsible automated decision-support features to support timely instructional decisions.

LEADERSHIP & ORGANIZATIONAL EXPERIENCE

Chairman, Aspiration Agency DPM REMA UPI Purwakarta <i>Purwakarta, West Java, Indonesia</i>	Dec 2024 - Dec 2025
• Led the agency team, coordinated the collection and classification of student aspirations, and tracked follow-up with institutional stakeholders.	
Head, Aspiration Agency HIMA PSTI UPI <i>Purwakarta, West Java, Indonesia</i>	Dec 2024 - Dec 2025
• Coordinated student-feedback channels and followed up on aspirations from Information Systems and Technology Education students.	
Education Department Staff HIMA PSTI UPI <i>Purwakarta, West Java, Indonesia</i>	Feb 2024 - Nov 2024
• Managed the Public Lecture program and delivered three sessions during one management period.	
Web Development Member Google Developer Student Clubs UPI <i>Universitas Pendidikan Indonesia</i>	Oct 2023 - Oct 2024
• Participated in web-development learning, peer collaboration, and community activities.	