RISKA MELLY AGUSTIN

I am a final-year Information Systems student with a strong concentration in Data Science and hands-on experience in software development, analytics, and system integration. My technical expertise spans Python, SQL, and Django, with growing proficiency in full-stack development using modern web technologies. With a structured, persistent, and detail-oriented mindset, I thrive on building intelligent digital solutions, particularly in educational and organizational contexts. My recent projects include deploying machine learning models and web-based platforms that support data-driven decision-making and early intervention systems.

EDUCATION

President University - Bekasi, Indonesia

Aug 2023 - Present

Bachelor of Information Systems (GPA: 3.90/4.00) — Aug 2023 – Present

ACHIEVEMENT AND CERTIFICATION

- Top 10 Finalist, AI Business Case Competition XL Axiata x University of Indonesia, 2023
- Finalist, Business Plan Competition IDEAS UGM, 2025
- Finalist, GEMASTIK ICT Scientific Paper National ICT Competition, 2023
- Digital Talent Scholarship Recipient Microcredential Program in Startup Foundation & AI Applications (by KOMDIGI), 2023
- Certified, Mastering Data Science, AI & Machine Learning Udemy, 2025
- AWS Certified Machine Learning Specialty, AWS Training & Certification, 2025
- AWS Certified Data Analytics Specialty, AWS Training & Certification, 2025

ORGANIZATION EXPERIENCE

Member of Student Catalyst Batch 4 – Jakarta

Jan - Sep 2024

- Conducted market research and audience analysis to support event planning and content strategies.
- Initiated content-driven engagement plans that increased digital interaction across IG and LinkedIn by ~25%.
- Collaborated with external partners and successfully secured 3 sponsorships for organizational programs.

Student Activity, Investment Club President University - Bekasi

Oct 2024 - Present

- Served as Vice Project Manager for an annual national-level essay competition on investment and economic strategy, attracting 100+ participants from various universities across Indonesia.
- Coordinated event planning and execution under the Student Activities (SNEA) division, in collaboration with Sinar Mas Sekuritas
 and the Indonesia Stock Exchange (IDX).
- Led a cross-functional team in organizing webinars and judging panels, enhancing campus financial literacy engagement.

Research and Development Analyst, StudentXCEO - Jakarta

Sep 2024 - Present

- Conducted competitive market analysis and opportunity mapping for early-stage startups incubated by the organization.
- Proposed strategic insights on brand positioning, pricing models, and customer segmentation used by partner startups in their pilot validation.
- Worked cross-functionally with teams in product, marketing, and operations to align recommendations with real-time business goals.

PUMA Organizational App – Flutter & Firebase

President University | Nov - Dec 2024

Developed a functional mobile app prototype to streamline event management and communication across major associations at President University.

- Designed a multi-role user system separating admin and member access, with features for event registration, notifications, and in-app voting.
- Integrated Firebase Realtime Database and Cloud Messaging for real-time updates and user interaction.
- Implemented QR-based attendance tracking and a modular content system for schedules and announcements.
- Conducted internal testing with organizational stakeholders to validate usability and system flows.
 Tools: Flutter, Firebase Realtime Database, Firebase Cloud Messaging

Wage Trend Forecasting with AI - Python & ML Models

Independent Project | Oct – Dec 2024

- Analyzed and predicted U.S. wage trends (1973–2022) across demographics and education levels using machine learning.
- Built Linear Regression, Logistic Regression, K-Means clustering, and ARIMA models for predictive and segmentation analysis.
- Achieved 85%+ accuracy on regression models (MAE: <\$2,500), revealing patterns across race, gender, and education tiers.
- Visualized insights through heatmaps, time-series graphs, and comparative bar charts using Matplotlib & Seaborn.
- Delivered findings in a comprehensive report supporting data-driven policymaking in workforce equity. **Tools**: Python, Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, Jupyter Notebook

Dormitory Management System - PHP & MySQL

Academic Project | Oct - Dec 2023

Designed and implemented a web-based dormitory management system to optimize operational workflows in campus housing.

- Built modules for room allocation, student profiles, occupancy logs, and automated notifications for payment and maintenance deadlines.
- Developed an admin dashboard with real-time data visualization of room usage, student feedback, and maintenance status.
- Collaborated with housing staff to gather functional requirements, ensuring alignment with real-world dorm operations.
- Reduced manual scheduling complexity through digital forms and database-driven reminders.
 Tools: PHP, Laravel, MySQL, HTML, CSS, JavaScript

Student Dropout Prediction Platform – Full-Stack ML Web App

Academic Project | Apr - Jun 2025

- Built and deployed a full-stack web platform for predicting student dropout risk and detecting behavioral anomalies using academic activity data.
- Trained XGBoost and Random Forest models on PostgreSQL-based student datasets, achieving up to 92% classification accuracy.
- Implemented KMeans and Isolation Forest for unsupervised anomaly detection (silhouette score > 0.72) to segment high-risk students.
- Integrated all models into a Django backend, with dual input modes: manual entry and dynamic search from database records.
- Developed frontend dashboards using Chart.js and vanilla JavaScript to visualize dropout risk, academic performance, and anomaly clusters.
- Delivered as a fully functional web application, combining backend logic, database integration, and interactive UI for institutional use.

Tools: Python, Django, PostgreSQL, Scikit-learn, XGBoost, Random Forest, KMeans, Isolation Forest, Chart.js, HTML, CSS, JavaScript

SKILLS

Technical Skills

Languages & Frameworks: Python (Advanced), SQL (Intermediate), JS (Basic), PHP (Intermediate), Laravel(Intermediate), Java

(Basic)

Libraries & Tools: Django, Flutter, Laravel, Scikit-learn, Firebase, Chart.js

Databases: PostgreSQL, MySQL

Analytics Tools: Excel, Power BI, Jupyter

ML Expertise: Classification, Regression, Clustering, Anomaly Detection, Time-Series, K- Means, XGBoost

Other Tools: Git, Google Colab, VSCode

Soft Skills

Business-Technology Alignment, Analytical Thinking & Problem Solving, Systematic & Logical Workflow, Stakeholder Communication, Requirements Gathering & Analysis, Team Collaboration, Adaptability in Tech-Driven Environments, Ethical Thinking in System Design.

Languages

Bahasa Indonesia (Native), English (Professional Proficiency – Written & Spoken)