



PRATCHAWIN BUNRAT

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GPA: 3.95 First Class Honors (Gold Medal, Rank 1)

SUMMARY

AI Engineer with strong experience in Full-Stack Development, AI/ML, Embedded Systems, and Linux Server Administration. Skilled in building web applications, APIs, real-time systems, OCR, computer vision, and hardware control systems. Able to work across frontend, backend, database, and infrastructure with a problem-solving mindset.

WORK EXPERIENCE

AI Engineer 6-month contract (CODEDIVA 253 Asoke, Bangkok, Thailand) Sep 2024 - March 2025

- Developed OCR system for Thai documents (ID cards, invoices)
- Generated synthetic Thai ID card images for model training
- Used custom templates, Thai fonts, and random data
- Integrated with web API for real-time processing
- Tech: Python, OCR, Computer Vision, Next.js

Fullstack Developer (TMCThaimechatronic 329, Rama2, Soi 44, Bangkok, Thailand) Aug 2025 - Present

- Designed and developed UAV (Drone) systems end-to-end, from system architecture to field testing
- Selected and integrated Flight Controllers (Pixhawk series), sensors, telemetry, and communication systems
- Developed a bomb release system using Projectile Motion equations, calculating optimal release timing based on altitude, speed, and trajectory
- Built a custom drone control application for monitoring and controlling UAV operations
- Real-time display of altitude, speed, position, and system status
- Designed and controlled a robotic arm system for machine gun (Negev) operation
- Integrated motor control, safety logic, and remote actuation
- Developed a fiber optic-controlled drone system
- Eliminated RF dependency to prevent signal jamming and electronic warfare threats
- Implemented communication architecture using serial/IP over fiber
- Worked with MAVLink, Pixhawk TELEM ports, Python, and embedded systems
- Conducted system integration, testing, and performance optimization for reliability and safety
- Fullstack web developer organize pbr.co.th

EDUCATION

Bachelor of Mechatronics Engineering with Honours

- Bachelor of Engineering (B.Eng.) in Artificial Intelligence Engineering
Rajamangala University of Technology Srivijaya (Rattaphum College)
- Specialized in Artificial Intelligence, Robotics, and Intelligent Systems
 - Coursework included Machine Learning, Computer Vision, Embedded Systems, Control Systems
 - AI Developer

TECHNICAL SKILLS

Programming Languages	Frontend	Backend	Database
• JavaScript / TypeScript • Python • SQL	• Next.js • React Native • HTML, CSS, Tailwind • Chart & Data Visualization	• FastAPI • NestJS • Node.js • REST API / WebSocket	• PostgreSQL • MySQL • MongoDB