# I Putu Wahyu Mahendra

Sydney, Australia | ipwahyumahendra@gmail.com | (+61)422-114-196

## EDUCATION

**University of Sydney** | *Bachelor of Advanced Computing* Sydney, NSW, Australia |**Jul 2024 – Present**

- Majoring in Computer Science and Cybersecurity
- WAM: **Distinction**
- Enthusiast in **Computer Science, Cyber Security, and Competitive Programming**
- **Relevant Coursework:** Intro to Programming, Object-Oriented Programming, Data Structures & Algorithms, Computer Systems (OS & Networks), Discrete Mathematics, Data Science, Data & Information Management, Agile Software Development, and Theory of Computation, System Programming, Distributed System
- Actively participated in **CTF competitions**, including **#2 at USYD CTF**, **#17 at CTF CIT (University of New Haven)**, and competing in the **Australia Cyber Security Games 2025**
- Engaged in **university clubs and organizations**, contributing to academic, technical, and community initiatives
- Continuously explore **self-learning resources** and personal projects to deepen expertise in advanced computing concepts.

## EXPERIENCE

**University of Sydney Cyber Security Society |** *Organization* NSW, Australia | **Jun 2025 -Present**

- **Tech Specialist Executive** | Feb 2026 - present:
  - Engineered and managed the scalable cloud-based infrastructure for society-wide CTF competitions, ensuring 99.9% uptime for 100+ concurrent participants.
  - Collaborated with the executive and CTF teams to design and implement technical solutions that support workshops, competitions, and training activities for society members.
  - Automated the deployment of security challenges using Docker and Infrastructure-as-Code (IaC) principles to streamline environment setup and teardown.
  - Monitored competition traffic for "fair play" and infrastructure stability, applying troubleshooting skills in Linux and networking environments.

- **CTF Subcommittee Member** | 2025-2026:
  - Sub-committee member in the **CTF (Capture The Flag) Division**, contributing to the design and development of competition challenges and training materials for USYD CyberSoc events
  - Assisted the **executive team** in organizing and running multiple society events, ensuring smooth coordination and engagement for participants
  - Participated in **cyber security workshops** on Blue Teaming, Red Teaming, and Penetration Testing to strengthen practical security skills

**Perhimpunan Pelajar Indonesia di Australia (PPIA)** | *Organization* NSW, Australia | **Jan 2025 -Present**

- Contributed to the Information Technology Directorate by collaborating on team projects and technical initiatives.
- Developed and maintained the backend systems for the PPIA website, focusing on database developing and data management.
- Participated in social, national, and seminar events to enhance personal growth and professional

networking.

- Strengthened organizational and responsibility skills through hands-on experience in planning and execution.

**Indonesia Maju Scholarship (Affirmation)**| *Awardee* Bali, Indonesia | **2023 – Present**

- Received the opportunity as one of the fifty students of Indonesia Maju Scholarship Batch 3 to study abroad for an undergraduate degree
- Followed the preparation program, including English and mathematics classes, seminars, and workshops

## PROJECT

- **Mini SOC Lab (Wazuh SIEM):**
  Designed and deployed a mini Security Operations Center (SOC) lab on VirtualBox by configuring a multi-node environment: Wazuh Manager/Indexer/Dashboard, Ubuntu endpoint, and Kali Linux attacker and simulating real world attacks mapped to MITRE ATT&CK:
  - Brute Force (T1110) using Hydra
  - Privilege Escalation (T1548.003) via sudo abuse
  - Valid Accounts (T1078) using Netcat

  Monitored and analyzed logs to generate actionable alerts via Wazuh Dashboard by troubleshooting network configurations (**NAT, Host-Only, Internal Network**) to ensure proper agent-server communication, and understanding of **log collection, SIEM pipelines, and detection engineering fundamentals.**
- **Automation & CI/CD Pipeline Project:**
  Designed and implemented a CI/CD pipeline using Jenkins, integrated with GitHub for automated build and deployment workflows by configuring Gradle as the build system to manage dependencies and automate project compilation and exposing local services using ngrok to enable external webhook triggers and testing

## CERTIFICATE

- **Kali Linux for Ethical Hackers**, Udemy — Mar 2025
  Credential ID: UC-947cdb8c-a854-4847-9253-0f0125e2eaa6
- **ACA System Operator Certification**, Alibaba Cloud — Mar 2025 (Expires Mar 2027)
  Credential ID: AAC06250204002686L
- **Automate and Scale: Unlocking the Power of IaC and DevOps for Alibaba Cloud**, Alibaba Cloud — Mar 2025 (Expires Mar 2027)
  Credential ID: ACFW42250400205145
- **Disaster-Proof Your Business: Mastering Recovery Strategies on Alibaba Cloud**, Alibaba Cloud — Mar 2025 (Expires Mar 2027)
  Credential ID: ACFW42250400205143
- **Introduction to Infrastructure as Code (IaC) and DevOps Practices**, Alibaba Cloud — Mar 2025 (Expires Mar 2027)
  Credential ID: ACFW42250400205144

## SKILLS

**Programming & Technical:**

- Languages: Intermediate proficiency in Python and Java (OOP); foundation-level skills in JavaScript, C, React, and Next.js.

- Cloud & Infrastructure: Hands-on experience with Alibaba Cloud (IaC, DevOps, Disaster Recovery) and managing CTF server infrastructure.
- Security Toolset: Solid working knowledge of Kali Linux, Wireshark, and Burp Suite for traffic analysis; experience with Wazuh SIEM for log monitoring.

**Soft Skills:**

- Leadership & Project Management: Leading technical teams as Tech Specialist Lead for USYD CyberSoc.
- AI-Enhanced Productivity: Leveraging AI tools to accelerate debugging, documentation, and technical research workflows.
- Team Collaboration: Experience working in cross-functional teams and society environments.
- Research & Analytical Thinking

**Languages:**

- Indonesian (Native), English (Fluent).

## INTERESTS

- **Cybersecurity & Ethical Hacking:** Passionate about understanding system vulnerabilities, penetration testing, and secure software design. Curious to explore how systems and security integrate, and eager to deepen that knowledge through practical experience.
- **Problem Solving & Algorithms:** Enjoy tackling complex problems through structured reasoning and efficient algorithm design.
- **Software Engineering & Scalable System Development:** Interested in designing and building scalable applications. Previously developed simple Java projects using Gradle as a build automation tool.
- **Technology & Innovation:** Interested in emerging tech trends like AI in cybersecurity and cloud security architectures.