

Ahmad Ishamul Ayady Akmal, S.T.

+62 822-3022-8019 | ishamulayadyakmal@gmail.com | linkedin.com/in/ahmadishamulayadyakmal

PROFESSIONAL SUMMARY

Metallurgical engineer and LPDP–Tsingshan Group scholar pursuing an M.Eng. at University of Science and Technology Beijing (USTB), specializing in continuous casting process simulation and non-metallic inclusion analysis using ANSYS CFD. Background spans electrical engineering, renewable energy systems, and AI-assisted technical workflows. **Targeting process engineering, R&D, laboratory analysis, and quality assurance roles within metallurgical and smelting operations.**

EDUCATION

M.Eng. Metallurgical Engineering — USTB Beijing Oct 2024 – Present

Thesis: Numerical Modeling on the Evolution and Distribution of Inclusions in Continuous Casting of Heavy Rail Steel

LPDP–Tsingshan Group Scholarship Recipient

B.Eng. Electrical Engineering — University of Jember Aug 2019 – Jan 2023

GPA: 3.66 / 4.00 · Thesis published: Q2 Scopus, Int. Journal of Power Electronics and Drive Systems (2023)

Djarum Beasiswa Plus Awardee

RESEARCH INTERNSHIP

Metallurgical Research Intern — Tsingtu Group Research Institute Oct 2025 & Mar 2026

Fujian, China | Internship

- Gained hands-on exposure to GB/T-standard metallographic characterization, inclusion analysis, and multi-lab QC workflows at Tsingtu Group R&D, complemented by structured lectures covering the full stainless steel production route and alloying principles.

PROFESSIONAL EXPERIENCE

Site Support Equipment Group Leader — PT Hasnur Riung Sinergi Sept 2023 – Sept 2024

Tapin, South Kalimantan | Fresh Graduate Development Program

- Supervised SHE-compliant maintenance of heavy mining equipment; coordinated cross-functional troubleshooting and structured fault documentation across a team of 17 mechanics and welders

CERTIFICATIONS & TRAINING

2026: Data Processing Fundamentals, Data Science & Gen AI with Azure — Dicoding Indonesia

2023: Renewable Power & Electricity Systems — University of Colorado Boulder (Coursera)

2023: Machine Learning & Front-End Developer — Dicoding Indonesia

2023: Electrical Power Generator: An Industrial Outlook — L&T EduTech

2022: Solar Energy — edX / Delft University of Technology

TECHNICAL SKILLS

Simulation: ANSYS Fluent / Workbench (CFD & FEA), continuous casting process modeling

Metallurgical fundamentals: Nickel, steel and stainless-steel production route, phase analysis, inclusion mechanisms, alloying principles.

Data & AI Tools: AI-assisted Python coding, Machine Learning fundamentals, Microsoft Fabric (Data Science), Azure AI (Gen AI), Technical & scientific writing

Laboratory environments: Familiar with GB/T quality standards, lab safety protocols, and QC workflow

Language: Mandarin – HSK 3 equivalent, English – Duolingo English Test: 110