MOHAMAD ALAMSYAH

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EDUCATION AND CERTIFICATIONS

Bandung Institute of Technology (ITB) **November 2023**
Bachelor of Science, Biomedical Engineering *Bandung, Indonesia*

- Completed 149 credits in biomedical, life sciences, up to strategy and management courses, and actively contributed in 10+ projects involving cross-functional teams. Notable courses include: Healthcare Technology Management, Biomedical System Design, Financial Planning, Creative Product Strategy, Probability and Biostatistics, Sustainable Development
- **Thesis Project:** Development Of Multi-Analyte Biosensor based on Screen-Printed Carbon Electrode (SPCE) Modified With Graphene Oxide and Gold Nanoparticles (GO-AuNP), supervised by Isa Anshori, M.T. Ph.D and Murni Handayani, Ph.D.

How To Grow (Almost) Anything, MIT Media Lab **Feb - May 2023**

- Enrolled a virtual course in MIT Media Lab learning synthetic biology with topics such as: gene editing, cell-free sensors, microfluidics, tissue engineering, bioproduction in industry
- Conducted hands-on tasks in virtual settings, including lab automation design with OpenTrons, protein molecule visualization of SARS-CoV-2 antibody with PyMol and AlphaFold2, primer design with Benchling, and cell imaging with Foldscope Instruments

Dataquest.io: Data Scientist in Python **Nov 2023 - Mar 2024**

- Completed a self-paced course in data science covering Python, SQL, and Tableau for data analysis and visualization, probability and statistics, API and web scraping, machine learning, and deep learning
- **Developed 20 end-to-end projects post-course (Mar 2024 - Nov 2025)**, all archived in website. Notable projects include: Hospital Inpatient Discharges in New York, E-Commerce Customers Sales and Sellers Marketing Funnel, Drug Reviews Sentiment Prediction in drugs.com, Pharma Retail Sales: Kimia Farma, Indonesia, US Healthcare Research Payments, Online Retail Product Segmentation and Customer Classification

FEATURED PROJECTS

Automatic Needle Burner for Medical Waste Management **Jan - Dec 2021**

- Built a medical device directed to COVID-19 medical workers in collaboration with Mechanical Engineering students of ITB (conducted in hybrid schedules with monthly progress reports)
- Mapped specifications, constraints, and design alternatives for the prototype, made diagrams of Model-Based Systems Engineering (MBSE) referring to the subsystems of design, and lastly implemented testing and troubleshooting for development of the prototype
- Created a portable needle burner capable of burning the tip, detaching the hub, and putting the detached piece into the storage in under five seconds for medical waste management

Blueprint: Building an Imaging Hospital in Indonesia **Aug - Dec 2021**

- Developed a draft proposal for an imaging hospital in Indonesia, aligned to regulatory requirements set by Indonesia's Ministry of Health, covering key operational infrastructures with an estimated total of IDR 24.712B
- Took into account essential hospital components, such as medical imaging equipment across multiple anatomy, imaging information systems, core human resources, and a digitally-rendered interior design for the hospital

Health Technology Entrepreneurship: Mental Health Apps for College Students **Aug - Dec 2021**

- Led the development of a business plan for Something, a SaaS-based mental health platform targeting college students in Bandung, Indonesia, with features such as medical counseling, daily self-assessment tools, personalized reminders, and community support groups.
- Defined strategic milestones, financial projections, and potential partnerships using frameworks such as Business Model Canvas and Value Proposition Canvas, forecasting a user reach of 100,000+ students across Indonesia within 5 years and a projected profit of IDR 2,989B
- Delivered a final pitch and live app demonstration to Biomedical Engineering students at ITB and Medical students at Airlangga University to gain interdisciplinary feedback and insights from a clinical perspective.