MOHAMAD ALAMSYAH

(+62) 851-7112-5672 | Bandung, Indonesia | mohamadalamsyah74@gmail.com | LinkedIn | GitHub | Website

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 after finishing the course, with notable examples include: Hospital Inpatient Discharges in New York, OLIST Brazil Customers Sales, Sellers Marketing Funnel Analysis (Tableau), Drug Reviews Sentiment Prediction in drugs.com, US Healthcare Research Payments, Sports Logging Web App, Product Segmentation and Customer Classification of Online Retail in UK (SQL, Python)

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.