

Ilma Aliya Fiddien

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WORK EXPERIENCES

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| AJARI Technologies Machine Learning (NLP) Engineer <ul style="list-style-type: none">Developing and maintaining deep learning models for text summarization, question-answering, and text-to-speech task for education use casesResearching and experimenting alternative methods to improve existing systems | Jakarta, Indonesia Oct 2023 - Ongoing |
| Self-employed/Freelance Programming, Data Science, and Machine Learning Tutor <ul style="list-style-type: none">Teach and give consultations for projects related to Python programming, data science, and machine learning.Some tools used: Tensorflow, PyTorch, Pandas, NLTK, SpaCy, OpenCV, Pillow. | Remote Feb 2022 - Ongoing |
| Bitlabs Academy Data Science Instructor, Associate <ul style="list-style-type: none">Developed data science learning materials in form of slides and Jupyter notebooks.Taught machine learning concepts and algorithms in a boot camp. | Remote July 2021 - Jan 2022 |
| YPM Salman ITB Program Manager of Perintis Scholarship Development <ul style="list-style-type: none">Researched & systemised a 4-year curriculum of leadership & academic development for 197 awardees.Led a team of 6 in designing and organising monthly leadership programs. | Bandung, Indonesia July 2021 - Jan 2022 |
| Omdena, Human Right First (Hrf) Junior Machine Learning Engineer <ul style="list-style-type: none">Collected and prepared the dataset using Twitter API, then labelled the raw data.Explored Transformers models for multilabel prediction tasks: detecting human right violations through social media texts. | Remote May 2021 - July 2021 |
| Institut Teknologi Bandung, Dept. of Mathematics, Algebra Research Group Research Assistant <ul style="list-style-type: none">Create a Python program to give a computational assessment of proofs proposed in a research paper. | Bandung, Indonesia Mar 2021 - Dec 2021 |
| Institut Teknologi Bandung, Dept. of Mathematics Assistant of Mathematics Simulation and Computation Laboratory <ul style="list-style-type: none">Taught MATLAB for mathematics modelling simulation to 50+ students.Assisted students in weekly lab practices and grade their work. | Bandung, Indonesia Sep 2019 - Dec 2019 |

EDUCATIONS

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| The University of Edinburgh MSc, Speech and Language Processing <ul style="list-style-type: none">Thesis: <i>Investigating Clear-Writing Principles for Scientific Communication: Automated with ClearMetrics</i>. Supervised by Adam Lopez, Ph.D.Relevant courses: natural language processing & understanding, automatic speech recognition, speech synthesis, AI ethics. | Edinburgh, UK 2022 - 2023 |
| Insitut Teknologi Bandung BSc, Mathematics <ul style="list-style-type: none">Thesis: <i>Partition Dimension of 2-Strong Product Graphs and Resolving Partition Finder Program for Some Classes of Graph</i>. Supervised by Prof. Dr. M. Salman A. N.Relevant courses: deep learning, graph theory, philosophy of science.External course: Google Bangkit 2021 - Machine Learning Path. | Bandung, Indonesia 2017 - 2021 |

SCHOLARSHIPS AND AWARDS

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| ISIC 2023 PPI UK , Best Essay in Social and Health Reconstruction Category Title: "Revolutionising Educational Inclusivity in Indonesia with Conversational AI" | 2023 |
| The Indonesia Endowment Fund for Education Scholarship , Indonesia Ministry of Finance | 2022 - 2023 |
| Salman Activist Scholarship (BAS) , Rumah Amal Salman | 2019 - 2020 |
| Improvement of Academic Achievement (PPA) Scholarship , Institut Teknologi Bandung | 2018 |

INVITED TALK

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| Guest Mentor Talks: Math and Deep Learning , Indonesia AI < video > | 19th Sep 2021 |
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RECENT VOLUNTARY/LEADERSHIP EXPERIENCES

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| Students as Change Agents, The University of Edinburgh Change Agent <ul style="list-style-type: none">Answered to Edinburgh City of Literature Council to elaborate on <i>How can we incite people from all walks of life to enjoy literature?</i> using current ecosystem between the university and local schoolsLed the team of 7's design thinking-oriented discussion, ensuring all members were on board. | Edinburgh Summer 2023 |
| AI for Indonesia Community AI for Agricultural Discussion Group, Guest Mentor <ul style="list-style-type: none">Led a research team, explored potential AI application in the country's agricultureHold bi-monthly seminar discussing AI applications in Indonesia for general audiences | Remote Nov 2021 - Oct 2022 |
| Keluarga Mahasiswa Islam ITB Member of Advisory Council <ul style="list-style-type: none">Supervised the organisation committee and coach the heads of sectorsDeveloped a structured learning curriculum for the organisation's think tank Vice Head of Human Development Sector, Think Tank <ul style="list-style-type: none">Designed vision, missions, and strategy for the organisation with a teamCoordinated 5 series of development programs for 200+ cadres with 3 departments and 2 committees | Bandung, Indonesia Jan 2021 - Jan 2022 Oct 2019 - Jan 2021 |
| ITB Character Development Center SMPE & SSDK Trainer <ul style="list-style-type: none">Explained the concept & application of proactive, end-goal setting, and prioritization habits to 60+ college freshmenManaged campus introduction events | Bandung, Indonesia May 2019 - Jan 2020 |

PERSONAL PROJECTS

Programming

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| Image Captioning with ResNet50 and LSTM - trained on MS COCO dataset; using PyTorch on GPU | 2021 |
| Indonesian Songs Lyrics Dataset - web scrapping using BeautifulSoup and concurrent's futures | 2021 |
| Macapedia: A Book Recommender System - using Tensorflow & GCloud; data scraped from Goodreads | 2021 |
| Graph Partition Dimension Finder - a Python GUI program using PyQt5, NetworkX, and PyVis | 2020 |
| Twitter Sentiment Analysis - on a political issue; a rule-based model using regex, NLTK, NetworkX | 2020 |
| Tower of Hanoi Game - a number theory application; using PyGame | 2019 |

Personal Development

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| Notion Template: Personal Contribution Plan | 2022 |
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OTHER SKILLS & INTERESTS

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| Language: | Indonesian and Sundanese (native), English (professional, IELTS Band 8.0). |
| Interests: | Jogging, reading books, watching documentaries, blogging, discussing psychology, philosophy and technology topics. |