Mohammad Hamid Asnawi, S.Stat

Bandung, Indonesia | hamid03082002@gmail.com | (+62)82120700341 | mhamidasn.github.io
linkedin.com/in/mhamidasn | github.com/mhamidasn | google-scholar | codewars.com/users/mhamidasn

I am a Google Certified TensorFlow Developer and a Bachelor of Statistics from Universitas Padjadjaran, with a strong passion for the fields of AI and data. Through my project work, research papers, work experience, and participation in competitions, I have cultivated diverse expertise in AI, machine learning, data science, data analysis, and data consulting. My commitment to knowledge sharing is evident through my research papers, and I take pleasure in continuously exploring the ever-evolving realm of technology through various certified platforms. With a keen interest in advancing AI and data-driven solutions, I am determined to contribute my skills and creativity to tackle real-world challenges and drive innovation in the industry.

WORK EXPERIENCE

Research Center for Artificial Intelligence and Big Data (AIDA) Universitas Padjadjaran
Bandung, Indonesia

- **AI & Big Data Research Assistant** (June 2022 – May 2023)
  - Conducted an experiment and research about computer vision, particularly 3D image segmentation on the COVID-19 CT-scan.
  - Wrote 2 research papers entitled "Lung and Infection CT scan-based Segmentation with 3D UNet Architecture and its Modification" and "UNet vs. LinkNet for Segmentation: Which One is Better for Visualizing the 3D Lung Construction of COVID-19?".
  - Developed and implemented a highly efficient data pipeline and ML modeling pipeline with MLOps integration, enabling automated parameter experiments and enhancing overall productivity.

Telkomsel
Jakarta, Indonesia

- **Data Scientist Intern (August 2022 – December 2022)**
  - Created 12 unsupervised Natural Language Processing (NLP) machine learning models to compare and find the best model for the topic modeling project.
  - Created a machine learning pipeline with the Kedro framework for the topic modeling code to make it more reproducible, maintainable, and modular.
  - Used kedro-mlflow to implement MLops to track the modeling experiments much easier.
  - Wrote 2 medium article about the introduction to kedro-mlflow and kedro-fastapi.

Jatinangor Research Center
Sumedang, Indonesia

- **Data Analyst and Data Consultant (January 2021 – December 2022)**
  - Assisted clients in solving their data analysis issues. I received a diverse range of clients with various problems, mostly related to their theses, and aided them in analyzing their data using a variety of statistical methods.
  - Tutored my clients on the appropriate methods and analytical steps to fit their particular problem

Universitas Padjadjaran
Bandung, Indonesia

- **Teaching Assistant (February 2021 – December 2021)**
- Teaching assistant for the computer programming laboratory class for first-semester statistics students, the multivariate data analysis 1 laboratory class for third-semester statistics students, and the database laboratory class for second-semester statistics students at Universitas Padjadjaran during the 2020/2021 and 2021/2022 academic years.

EDUCATION

Bachelor of Statistics (Sarjana Statistika / S.Stat)
Universitas Padjadjaran (undergraduate/bachelor studies) – Indonesia – GPA: 3.89/4.00

Machine Learning Path Student
Bangkit Academy led by Google, Tokopedia, Gojek, & Traveloka (non-formal studies) – Final score: 93.05/100

PAPER RESEARCH PUBLICATION

Paper Research Project
Please check my Google Scholar account for full information and manuscripts of each paper: **Scholar Account**

- Paper in English

1. "Lung and Infection CT-Scan-Based Segmentation with 3D UNet Architecture and Its Modification" Published in MDPI Healthcare as part of a special issue on Artificial Intelligence (AI) and Machine Learning (ML) in Medical Imaging Informatics towards Diagnostic Decision Making.
2. "A Comparison of SVM and Naïve Bayes Classifier in Binary Sentiment Reviews for PeduliLindungi Application" published in IEEE Xplore as part of the 2021 International Conference on Artificial Intelligence and Big Data Analytics.

- Paper in Bahasa Indonesia (The title of the paper has been translated into English, and all of them have been published in the National Statistics Proceedings of Universitas Padjadjaran)
  1. "Comparison of Naïve Bayes, K-NN, and SVM Algorithms in Classifying Social Media Sentiments"
  2. "Hierarchical Cluster Analysis for Grouping Provinces in Indonesia based on People's Welfare Indicators"
  3. "District/City Mapping in West Java Based on Type of Agricultural Business Using Correspondence Analysis"
  4. "Application of Correspondence Analysis to Mapping Provinces in Indonesia Based on Number of Health Personnel"
  5. "ARCH/GARCH Application in PT Kimia Farma (Persero) Tbk Stock Price Prediction"

CONFERENCE PARTICIPATION

Basic Science International Conference 2022
Presented my research titled "UNet vs. LinkNet for Segmentation: Which One is Better for Visualizing the 3D Lung Construction of COVID-19?" at the conference and was honored as the best presenter.

International Conference on Artificial Intelligence and Big Data Analytics (ICAIBDA) 2021
My team and I Presented our research titled "A Comparison of SVM and Naïve Bayes Classifier in Binary Sentiment Reviews for PeduliLindungi Application".

Universitas Padjadjaran Statistics National Conference 2021
My team and I presented our five research papers on different topics in the field of data modeling, including time series data modeling, supervised NLP modeling, and multivariate data modeling. All of the research papers we presented were successfully published in the National Statistics Proceedings of Universitas Padjadjaran.

OTHER RELEVANT EXPERIENCE

Certification
- TensorFlow Developer Certification by Google Tensorflow

Project
- "SkinGortihm: Know What You Need" application project (as a machine learning engineer)
  Collected and labelled (annotated image masks for segmentation), built, and trained a total of 6 image segmentation models that were deployed in the SkinGotihm app to analyze users' face conditions (Acne, Wrinkles, Black Spots, Puffy Eyes).

Achievement/Competition
- Tick Tick Bloom: Harmful Algae Bloom Detection Challenge 2023 hosted by NASA at DrivenData
  Ranked 33 out of 1377 participants
- Best Presenter at the Basic Science International Conference 2022
  Presented my research titled "UNet vs. LinkNet for Segmentation: Which One is Better for Visualizing the 3D Lung Construction of COVID-19?" where I compared two convolutional neural network (CNN) architectures for segmenting CT-scan images. I was also honored to be selected as the best presenter at this year's Basic Conference.
- Data Analysis Competition Informatics Festival (IFEST) 2021
  Made it to the final round of the national-level data analysis competition with a paper for the preliminary round entitled "A Comparison of SVM and Naïve Bayes Classifier in Binary Sentiment Reviews for PeduliLindungi Application"
- Data Analytics Competition PRS ITS 2021
  Managed to become one of the semifinalists in the SE Asia level data analyst competition.

Specialization and Course Certificate
- "Mathematics for Machine Learning Specialization" developed by Imperial College London and Coursera
- "Google IT Automation with Python Specialization" developed by Google and Coursera
- "DeepLearning.AI TensorFlow Developer" specialization developed by DeepLearning.AI and Coursera.
- "TensorFlow: Data and Deployment" specialization developed by DeepLearning.AI and Coursera.
- Have earned >30 course certifications in the field of AI, data, or tech in general from various reputable platforms.
- To see the full list of my certification please check my **website** or click: **Certification List**

Organization Experience:
- Head of STATIS – Statistics Badminton (January 2022 – December 2022)
- Deputy Head of Badan Perwakilan Anggota (Legislative Organisation) of Statistics Student at UNPAD (January 2021 – December 2021)
- Deputy Head of STATIS – Statistics Badminton (January 2021 – December 2021)

Skills (-) and Language (•)

- Python (Proficient)	- SQL (Intermediate)	- Data Analysis (Intermediate)
- Machine Learning, AI (Intermediate)	- Statistical Software (Intermediate)	- R / RStudio (Intermediate)
- Statistical thinking and Analysis (Intermediate)	- Tableau, Data Vis (Intermediate)	- Microsoft Apps (Proficient)
• Bahasa Indonesia (Native speaker)	• English (C1 – advanced/proficient user – **IELTS** certified)	