

ABYOSO HAPSORO NURHADI

📍 West Java, Indonesia ✉️ abyoso.hapsoro@alumni.ui.ac.id  abyoso-hapsoro  abyoso-hapsoro

EDUCATION

B.Sc. in Mathematics

GPA: 3.42, High Merit
Jul 2016 – Jul 2022

Applied Data Science

Mar 2022 – Mar 2023

Machine Learning

GPA: 4.00, Distinguished
Jan 2022 – Jul 2022

UNIVERSITY OF INDONESIA (UI)

Thesis: *COVID-19 Degree of Severity Classification with Model Selection supported by Conformal Reliability*

WORLDQUANT UNIVERSITY

Eight end-to-end applied Data Science projects

BANGKIT ACADEMY

Capstone: *Prototype Mobile Application for Post-Hospital Discharge Suicide Risk Prevention*

WORK EXPERIENCE

Mathematics Teacher & Curriculum Advisor

Part Time, Onsite
Oct 2024 – Present

SEKOLAH TINGGI ILMU KESEHATAN MITRA KELUARGA

- Teaching Foundational Mathematics and Introduction to Nursery Mathematics to first-year undergraduates, strengthening their core mathematical concepts
- Co-leading curriculum development with quantitative and qualitative insights
- Streamlining evaluations to track student progress and course effectiveness
- Managing timetables, coordinating team operations and administrative tasks

Machine Learning Instructor

Part Time, Remote
Jan 2023 – Jul 2023
(7 months)

BANGKIT ACADEMY

- Recognized as a Rising Star Contributor, given for showing the most significant improvement during the program
- Customized teaching materials resulting in 91.53% student satisfaction rate surpassing the average of 90.1%, enhancing the overall learning experience
- Assisted students in preparing for the TensorFlow Developer Certification

Head of Laboratory Assistants

Part Time, Onsite
Jan 2019 – Jan 2020
(1 year 1 month)

UI, DEPARTMENT OF MATHEMATICS

- Effectively led a team of 9 computation and 4 statistics lab assistants throughout both terms of 2019, ensuring smooth operation and coordination
- Provided mentorship to 4 computation and 2 statistics lab assistant interns
- Designed laboratory sessions curricula to supplement regular curricula
- Efficiently managed timetables and coordinated lab usage for various activities, optimizing resource allocation and ensuring a seamless schedule

Multiple Assistant Positions

Part Time, Onsite
Feb 2018 – Jan 2020
(2 years)

UI, DEPARTMENT OF MATHEMATICS

- Lecturer Assistant for 5 courses in Mathematics and Computer Science subjects
- Mathematical Learning Center Assistant for peer-to-peer teaching open for all students in the university, specializing in Computational Mathematics
- Laboratory Assistant for 9 subjects using Python, R, Mathematica and LaTeX

Mathematics Tutor

Part Time, Onsite
Aug 2018 – Aug 2019
(1 year 1 month)

PRIMAGAMA TUTORING AGENCY

- Taught compulsory and elective Mathematics based on national curriculum to middle school and high school students
- Provided 1-on-1 consultations for students that request supplementary lessons

RESEARCH EXPERIENCE

Research Assistant

Part Time, Hybrid
Apr 2019 – Jul 2019

UNIVERSITY OF INDONESIA (UI)

Provided assistance to a PhD candidate majoring Biomedical Science by utilizing interpretable Machine Learning techniques for research on Schizophrenia disorder

SCHOLARSHIP

Machine Learning Foundations
Sep 2022 – Oct 2022

DIGITAL TALENT SCHOLARSHIP / AMAZON WEB SERVICES ACADEMY

Acquired practical skills in AWS Machine Learning utilizing various services such as Amazon SageMaker, Amazon Forecast, Amazon Rekognition, and Amazon Lex

ACHIEVEMENT

2nd Winner
University Scale
Nov 2019

FASILKOM UI, INTERNAL PROBLEM SOLVING CONTEST

Solved four difficult problems on the topics of fractional part, constrained sums, substring manipulation and graph theory using preferred coding language of choice

3rd Winner
National Scale
Apr 2019

IMERI UI, OPEN INNOVATION

Designed and implemented an early Schizophrenia factor determiner prototype using Python by syntactical analysis and speech semantics of human conversation

Finalist
Faculty Scale
Feb 2019 – Mar 2019

FMIPA UI, MOST OUTSTANDING STUDENT SELECTION

Selected as one of two department representatives due to exceptional record. The faculty selection evaluates on categories like scientific article and English speech

1st Winner
Multinational Scale
Sep 2018

ITB, MATHEMATICAL MODELING COMPETITION

Implemented a time series trend seasonal model using Python and R to for product sales estimation and conclusive evidence on the order of profitable products

Semifinalist
National Scale
Sep 2018

UNJ, CALCULUS CUP

Solved undergraduate level calculus problems with question material ranging from first year to third year, including topics in pure mathematics specialty

PROJECT

REAL-TIME INDONESIAN TWEETS SENTIMENT ANALYTICS DASHBOARD

Nov 2021

- 1 of 2 best milestone projects for an Analyzing Twitter's Tweets Data workshop made using Python and HTML
- Designed Flask application HTML output and hosted deployment on the web
- Compared many different classifiers and optimized best performing models achieving 77.02% accuracy

LINEAR REGRESSION ANALYSIS ON SALES BY ADVERTISING BUDGETS

Jun 2019

- Applied complete linear regression analysis on marketing dataset of media advertising budgets to sales on R
- Significantly improved adjusted R-squared from all-feature simple linear regression of 0.8962 to 0.9857

ALGORITHM FOR PSYCHOSIS PREDICTION ON CLINICAL HIGH-RISK TEENAGER GROUP USING SYNTACTICAL ANALYSIS AND SPEECH SEMANTICS

Apr 2019

- Implemented a 3D Convex Hull Classifier to classify highly descriptive verbose and non-verbose speech
- Achieved mean accuracy of 95.36% and mean precision of 93.93% with less than 0.02% cross validation error

TRAINING

- Southeast Asia Machine Learning School *Jul 2019*
- Tokopedia Text Mining to Sentimental Analysis *Nov 2018*
- Data Science Indonesia Deep Dive into Data Analytics *Apr 2017 – May 2017*
- Pacmann Machine Learning for Beginners *Jan 2017 – Feb 2017*

ORGANIZATION

- Vice Person in Charge for Registration Division of Logika UI *Jun 2017 – Feb 2018*
- Staff for Knowledge Division of UI Mathematics Student Union *Mar 2017 – Feb 2018*
- Person in Charge for Essay Competition of UI Mathematics Student Olympiad *May 2017 – Nov 2017*
- Mentor of Freshman Student Creativity Program in Research *Aug 2017 – Oct 2017*

ADDITIONAL

Certifications: TensorFlow Developer, Oracle Machine Learning, Society of Actuaries Financial Mathematics