Nur Khamidah, S.Stat. | Data Scientist

Bogor, Indonesia 16116 • nur.khamidah@apps.ipb.ac.id / nurkhamidah.sta@gmail.com • +62813 7181 6841

Data Scientist with a strong foundation in statistical modeling, machine learning, and data visualization. Proven expertise in Python, R, SQL, and NoSQL databases, with a track record of developing innovative solutions and insightful analytics. Adept at handling large datasets, conducting comprehensive research, and delivering actionable insights. Seeking to leverage my skills and experience to contribute to cutting-edge projects in data science and analytics. Some of the analytical techniques mastered include statistical modeling, analysis of unstructured data such as text data, machine learning including clustering and classification and their anomaly handling and interpretation, and deep learning with BERT.

Interactive Version

Tableau

Streamlit

Links

GitHub	github.com/nurkhamidah
LinkedIn	linkedin.com/in/nurkhamidah
Research Gate	https://www.researchgate.net/profile/Nur-Khamidah-3

Education Experiences

IPB UNIVERSITY (ON GOING)   **Bogor, Indonesia**
Master, Statistics and Data Science   **2022 – current**
Relevant Coursework: Machine Learning, Deep Learning, Natural Language Processing, Database Engineering, Data Visualization, Dashboard Making
Funding: Fully Funded Scholarship by Education Endowment Fund from Ministry of Finance, Indonesia

BRAWIJAYA UNIVERSITY (GPA 3.91 of 4.00)   **Malang, Indonesia**
Undergraduate, Statistics   **2017 – 2021**
Thesis: Perbandingan Ketepatan Klasifikasi Dengan CART *(Classification and Regression Tree)* dan Regresi Logistik pada Pasien ILI (*Influenza Like Illness*) di RSUD Dr. Soetomo Surabaya
Relevant Coursework: Machine Learning, Computational Statistics, Classification Algorithm

Work Experiences

SINARMAS MINING   **Jakarta, Indonesia**
IT Trainee from IT Dev Programme   **Nov 2021 – Mar 2022**
- Participated in initial training as a full stack developer by completing various tasks and training in backend development with Go, database engineering with both SQL and NoSQL database systems, and frontend development with JavaScript, React JS, and various other tools.
- Worked on several projects aligned with the training requirements.

PT UTAMA ABADI SEJAHTERA   **Malang, Indonesia**
Research Staff   **Oct 2020 – July 2021**
PT Utama Abadi Sejahtera has been engaged in research consulting since April 1, 2019. focusing on business and public research. This company leads to the Center for Statistical Modeling Research in Management (KKU-PSBM) FMIPA Brawijaya University as the forerunner of the establishment of the company. Business research carried out includes HR, marketing, and risk management. Meanwhile, the public research conducted is related to public policy, public services, economy, and social.
- Developed research proposals and improved them according to the client's information needs
- Developed data collection instruments and conducted data collection through surveys to more than 100 respondents in 1 month
- Compiled research results and presented conclusions and recommendations to clients according to the results obtained
- Published research in international journals

Organization Experience

PROFESSIONAL ASSOC. OF STATISTICS AND DATA SCIENCE POSTGRADUATE STUDENT OF IPB UNIVERSITY (HIMPRO PASCA STATISTIKA IPB UNIVERSITY)   **Bogor, Indonesia**
Scientific Division Staff   **Jan 2023 – Dec 2023**
- Conducted guidance and instruction on the course materials needed by postgraduate students of the Department of Statistics, IPB University through various learning activities.
- Provided training in accordance with the competencies required by postgraduate students of the Department of Statistics, IPB University through boot camps and workshops.
- Enhanced the statistical knowledge of postgraduate students of the Department of Statistics, IPB University through various talk shows and seminars.
- Prepared postgraduate students of the Department of Statistics, IPB University for exams by providing a bank of course-related questions as study material.

Leadership and Activities

STATISTICS ON TRAINING #1: SPATIAL MODELING ON DATA AREA   **IPB University, Indonesia**
Treasurer   **Feb 2023 – Mar 2023**
Presentation of material related to spatial data analysis that can be applied to statistics and data science by academics, along with a knowledge-sharing session on GIS applications and their implementation in the development of statistics and data science, accompanied by hands-on practice by relevant practitioners. As the treasurer, my duties were to manage the cash flow of activities and to prepare financial accountability reports for the Department of Statistics, IPB University. This event was successfully attended by 141 participants, exceeding the target of 100 participants, and the activity's funds experienced a significant surplus.

SPARKLING RAMADHAN: **IPB University, Indonesia**
Head of Event Division   **April 2023**

Sparkling Ramadhan is a sharing event organized by Himpro to enhance spirituality and internal togetherness within the Department of Statistics and Data Science, IPB University, while also strengthening the bonds of friendship within the department. Additionally, this event is part of the community service agenda, which includes providing donations to orphans around IPB University. As the event division chairperson, my main responsibility was to organize the event details from start to finish and coordinate with other divisions to ensure the event's success. During this event, the series of activities proceeded according to the rundown, and there were no issues.

STATISTICS ON TRAINING #2: ADVANCED WEB CRAWLING & WEB SCRAPING
                                                  IPB University, Indonesia
Chief Executive   **Apr 2023 – May 2023**

A knowledge-sharing session on Advanced Web Crawling and Web Scraping, accompanied by intensive hands-on practice using R to collect data from a website. This is crucial for postgraduate students of the Department of Statistics, IPB University, as data management and collection are essential skills that every student must possess. As the chief organizer, I was responsible for the overall smooth running of the event and the details concerning its success. With online meetings held once a week, this activity aimed to provide participants with optimal skill enhancement opportunities. This event was exclusively attended by 24 participants out of the 25 available slots.

WELCOMING NEW POSTGRADUATE STUDENTS   **IPB University, Indonesia**
Master of Ceremonies   **August 2023**

Himpro is also responsible for introducing new students to campus life during their postgraduate education, where IPB University has a distinct campus culture compared to other universities in Indonesia. As the MC, I was responsible for guiding the event smoothly. Despite my limitations, I successfully managed to lead the event to its completion. This experience significantly enhanced my soft skills in public speaking.

WEBINAR PENULISAN & PUBLIKASI JURNAL STATISTIKA   **IPB University, Indonesia**
Master of Ceremony & Moderator   **Aug 2023 – Sep 2023**

This webinar, organized by Himpro, aimed to deepen the knowledge of students, especially postgraduates at IPB University, who are interested in publishing their research, a process that typically takes a long time. During this sharing session, participants were encouraged to discuss in detail with the speakers about research in the field of statistics and the publication process. As the MC and moderator, my responsibility was to guide the discussion and ensure the smooth progression of the event from start to finish so that participants could gain as much insight as possible from the speakers, in line with the initial objectives of the webinar.

CLOSING CEREMONY DTS TSA IPB X KOMINFO RI   **IPB University, Indonesia**
PR, Decoration & Documentation Division Head   **Nov 2023**

DTS TSA is a collaboration between the Ministry of Communication and Information Technology of the Republic of Indonesia (Kominfo RI) and the Department of Statistics and Data Science, IPB University, to facilitate data science training for students from various universities across Indonesia. The closing ceremony was held to conclude the training and to award the students who performed best during the program. As the PR, Decoration & Documentation Division Head, I was responsible for preparing all designs and multimedia needs, including videotron content, video editing, pamphlets, posters, and other multimedia equipment within a short timeframe. This experience was very challenging because the participating team was limited and the deadlines were very tight. Additionally, design work was entirely new to me.

BELAJAR BARENG BY HIMPRO PASCA STATISTIKA   **IPB University, Indonesia**
Project Responsible   **Jan 2023 – Dec 2023**

This activity involved discussions, exercises, and collaborative learning on course materials or preparations for midterm and final exams for Master's students in Statistics and Data Science, along with one or more appointed instructors. As the core person in charge, I was responsible for archiving and providing a question bank, as well as organizing study sessions, from recruiting tutors to scheduling activities. Throughout the period, at least 4 activities were conducted each semester with different courses and classes of participants.

Research and Publications

MAJALAH ILMIAH MATEMATIKA DAN STATISTIKA
University of Jember, Indonesia
Regularisasi Model Pembelajaran Mesin dengan Regresi Terpenalti pada Data yang Mengandung Multikolinearitas (Studi Kasus Prediksi Indeks Pembangunan Manusia di 34 Provinsi di Indonesia)
February 20, 2024   [LINK]

LEBESGUE: JURNAL ILMIAH PENDIDIKAN MATEMATIKA, MATEMATIKA DAN STATISTIKA
Universitas Bina Bangsa, Indonesia
Penerapan Multi-Clustering dalam Pengelompokan Kabupaten/Kota di Provinsi Jawa Barat Berdasarkan Indeks Desa Membangun
December 30, 2023   [LINK]

FINAL PROJECT (UNDERGRADUATE THESIS)
Brawijaya University, Indonesia
Perbandingan Ketepatan Klasifikasi Dengan CART (Classification and Regression Tree) dan Regresi Logistik pada Pasien ILI (Influenza Like Illness) di RSUD Dr. Soetomo Surabaya
Nov 2021 – March 2022 (Unpublished)

FIELD WORK PRACTICE REPORT
Brawijaya University, Associated with Badan Penanggulangan Bencana Daerah Kab. Gresik
Penerapan Metode Peramalan ARIMA (Autoregressive Integrated Moving Average) dalam Menentukan Jumlah Penambahan Kasus Positif COVID-19 di Kabupaten Gresik
Aug 2020 – Sep 2020 (Unpublished)

Other Projects

DASHBOARD - LINEAR REGRESSION EXPLORATION
A collaborative project between the Department of Statistics, IPB University for the STA1111 course (Data Visualization, undergraduate) and the STA1563 course (Data Exploration and Visualization, postgraduate).
Tools: *R Shiny, R Studio*
Skills related: *Dashboard Making, Data Visualization, Linear Regression, Exploratory Data Analysis*
Links: *[Dashboard]   [GitHub]*

SIMPLE DATABASE PROJECT
A dashboard using RShiny from STA1562 Statistical Database Management final project (collective) My responsibility is being a backend and frontend developer for this project.
Tools: *R Shiny, R Studio, PostgreSQL*
Skills related: *Dashboard Making, Data Visualization, Linear Regression, Database Design, Administration, and Management*
Links: *[Dashboard]   [GitHub]*

DASHBOARD - BOGOR AIR QUALITY SCRAPING THROUGH US AQI
A dashboard used as a final project from STA1562 Statistical Data Management. This is an individual project.
Tools: *Python, Streamlit, MongoDB, GitHub Actions*
Skills related: *Dashboard Making, Web Scraping, Data Visualization, Database Design, Administration, and Management*
Links: *[Dashboard]*   *[GitHub]*

CAPSTONE PROJECT - FINAL PROJECT DQLAB
A dashboard discussing and presenting about a crucial issue in Indonesia. Created as a final project and requirement of completeness of theDQLab Python Programming bootcamp.
Tools: *Python, Streamlit,*
Skills related: *Dashboard Making, Data Visualization, Web Content Writing*
Links: *[Dashboard]*   *[GitHub]*

Skills & Interests

Language   **:** Indonesia (Native), English (with TOEFL score 527)
Technical Skills   **:**
-    Programming Language: Go & Javascript, Python (Sklearn, Streamlit, Keras, TensorFlow, PyTorch, etc.) & R
-    Data Collecting: Sampling Technique, Web Crawling & Scraping
-    Databases: SQL, PostgreSQL, MongoDB
-    Data Analysis: Linear Models, Nonlinear Models, ANOVA, Assumption Tests & Handling, Text Analytics
-    Machine Learning: Supervised & Unsupervised Algorithms, Clustering, Classification, Anomaly Detection, Feature Selection
-    Deep Learning: BERT, LSTM
-    Data Visualization: R Shiny, Streamlit, Plotly, Matplotlib

Certifications

PROFESSIONAL ACADEMY PROGRAM: DIGITAL TALENT SCHOLARSHIP 2021 FOR DATA SCIENTIST
Issued by: Kementerian Komunikasi dan Informatika RI
Credential ID: 091316107150-19/DTS/BLSDM.KOMINFO/12/2021
Nov 2021 - Jun 2022

and other certifications can be accessed through this link.

Other Experiences

LECTURE ASSISTANCE - STA1342 TEKNIK PEUBAH GANDA
S1 Statistika dan Sains Data, IPB University
Aug 2023 – Dec 2023

LECTURE ASSISTANCE - STA1514 STATISTIKA UNTUK KETEKNIKAN
S2 Ilmu Pangan, IPB University

Aug 2023 – Dec 2023

LECTURE ASSISTANCE - STA1583 TEXT ANALYTICS
S2 Statistika dan Sains Data, IPB University
Jan 2024 – Jun 2023

DATA ANALYST - INDEKS KEBAHAGIAAN MASYARAKAT KOTA BEKASI 2023
S1 Statistika dan Sains Data, IPB University x Pemerintah Kota Bekasi, Jawa Barat
Jun 2023 – Oct 2023

DATA ANALYST - INDEKS KEBAHAGIAAN MASYARAKAT KOTA DEPOK 2023
S1 Statistika dan Sains Data, IPB University x Pemerintah Kota Depok, Jawa Barat
Jun 2023 – Aug 2023