

# DANIEL SETHIO

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## PROFESSIONAL SUMMARY

Dynamic and solution-oriented Data Scientist with extensive experience in developing, deploying, and monitoring machine learning models in production environments. Proficient in Python and R, with hands-on experience in PostgreSQL, Docker, version control, Linux, and cloud computing. Possess strong foundation in statistics and mathematics for data analysis, delivering actionable insights and interactive dashboards using BI tools.

## SKILLS QUALIFICATION

### Software Skills

- Python, R, Docker, Git
- Apache Airflow, Spark
- Tableau, PowerBI
- PostgreSQL, MySQL
- Cloud Computing: GCP, AWS

### Business and Analytics Skills

- Fraud Analytics
- Risk Analytics
- Financial Analytics
- Retail Analytics
- Statistical Analysis

### Professional Skills

- Critical and Analytical Thinking
- Creative Problem Solving
- Writing and Presentation
- Time Management
- Fast Learner

## WORKING EXPERIENCES

**Digital Data Venture** (subsidiary of Multipolar), Jakarta, Indonesia

**Senior Data Scientist** | October 2024 – present

- Designed and implemented unsupervised machine learning models to identify frequent co-purchase products, boosting cross-selling opportunities by 20%
- Built customer segmentation models using machine learning, analyzing behaviors and trends to enable personalized marketing campaigns
- Developed chatbot analytics, allowing stakeholders to generate tables and visualizations from CSV files through prompt-based queries

**Digital Daya Teknologi** (subsidiary of Multipolar), Jakarta, Indonesia,

**Data Scientist** | July 2024 – September 2024

- Developed unsupervised machine learning models to detect anomalous transactions, aiding stakeholders in identifying fraudulent activities
- Created a graph network analysis tool using RShiny to visualize and track suspicious fund flows
- Developed deep neural networks to uncover trends and patterns in cybersecurity threats, helping stakeholders proactively prepare for potential threats

**Cognes Medical Solution**, Stockholm, Sweden

**Data Scientist (Internship)** | April 2024 – June 2024

- Collected, cleaned, and prepared a dataset of 1,329 patient face images for data modelling
- Developed convolutional neural network models to classify dementia with 71% accuracy
- Conducted failure analysis on the 29% misclassification rate, providing actionable recommendations for improving model performance

**Uppsala University**, Uppsala, Sweden

**Postdoctoral Researcher** | January 2020 – March 2023

- Conducted a comprehensive review of state-of-the-art methods in accelerating convergence conditions
- Created a consistent dataset of 2,080 data points to achieve research objectives
- Developed machine learning models that reduced iteration cycles by 20% compared to the existing methods

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**Southern Methodist University**, Dallas, United States

*Postdoctoral Researcher* | September 2017 – December 2019

- Automated data collection, organization, and cleaning processes using python scripts, reducing 70% processing time
- Conducted data manipulation and statistical analysis on large datasets using python and bash scripts
- Created insightful data visualization using R scripts, effectively highlighting trends and patterns

## PROFESSIONAL AND PERSONAL PROJECTS

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### [Data Science] Market Basket Analysis

**Digital Data Venture** | December 2024 - January 2025

- Identified co-purchased products using the Apriori Algorithm, enhancing sales strategies.

### [Data Science] Chatbot Analytics

**Digital Data Venture** | October 2024 - November 2024

- Implemented retrieval-augmented generation (RAG) techniques for seamless interaction with CSV files through user prompts.

### [Data Science] Flow of Funds Using Network Analysis

**Digital Daya Teknologi** | November 2024 - December 2024

- Built a graph network analysis tool using R to track money movements and detect suspicious flow of funds.

### [Data Science] Anomaly Detection in Transactional Data

**Digital Daya Teknologi** | August 2024 - September 2024

- Developed an unsupervised machine learning model using the Minimum Covariance Determinant algorithm to detect anomalous transactions.

## AWARDS AND ACHIEVEMENTS

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- **Erasmus Mundus Fellowship** - European Union (EU) Fellowship Program, 2010-2012
- **Pertamina Scholarship** - Scholarship from the Pertamina foundation, 2005-2007

## EDUCATION

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**Pacmann**, Jakarta, Indonesia

Data Science Program | September 2024 - Present

**Datacamp**, Uppsala, Sweden

Data Engineer, Data Analyst, and Data Science Program | June 2023 - January 2024

**University of Geneva**, Geneva, Switzerland

PhD in Computational Modeling | March 2013 - July 2017

**University of Groningen**, Groningen, the Netherlands

European Master in Theoretical Chemistry and Computational Modeling | September 2010 - August 2012

**Bandung Institute of Technology (ITB)**, Bandung, Indonesia

Bachelor of Computational Chemistry | August 2004 - June 2008

## COURSES AND CERTIFICATES

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[python and object-oriented programming](#), [tableau](#), [keras](#), [AWS cloud](#), [data engineer program](#), [data analyst program](#), [data scientist program](#)