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SUMMARY

I am an aspiring data scientist who has acquired relevant experiences from internships, projects, and school courses. I have produced numerous projects in the area of data analytics, machine learning (both text and image), AI, and big data technology. I am a well-rounded and agile individual with profound social and leadership skills who role as the team's initiator.

EDUCATION

University of Birmingham | 01/2020 – 07/2021
Exchange Student at the Department of Computer Science
Modules Taken: Intelligent Data Analysis, Mathematical Modelling and Decision Making, Artificial Intelligence, Software Engineering

Universitas Indonesia | 08/2018 – 08/2022
Computer Science Undergraduate, Dept. Computer Science
Courses taken: Data Structure and Algorithm, Statistics and Probability, Linear Algebra, Databases, Operating Systems, Digital Image Processing, Web Design and Development, Data Science

WORK EXPERIENCE

University Innovation Fellow | 08/2021 - present
universityinnovationfellows.org/about-us/program/| Stanford University, CA, US
- ❖ Currently in extensive training by facilitators from Stanford University's Hasso Plattner Institute of Design (d.school) e.g. design thinking, and lean startup modules, where we are expected to create opportunities to support innovation and entrepreneurship in Universitas Indonesia
- ❖ Public profile: universityinnovation.org/wiki/Fellow:Fathinah_Asma_Izzati

Data Scientist Intern | 08/2021 – present
Telecom Multinational Company | PT XL Axiata Tbk, Indonesia
- ❖ Enhance machine learning model to predict tower revenue based on external and internal data
- ❖ Enhance machine learning model to suggest the potential area of to expand the company's telecommunication tower

Google Bangkit Machine Learning Graduate | 02/2021 – 07/2021
Ministry of Education along with Google, Gojek, Traveloka, Tokopedia
- ❖ Be among the 3000 selected students out of 25.000 applicants to participate in a 6-months tensor-flow machine learning training from industry experts
- ❖ Top 50 capstone projects out of 500 submissions
- ❖ License earned: DeepLearning.AI TensorFlow Developer Specialization, Mathematics for Machine Learning Specialization, Google IT Automation with Python Specialization, Google IT Support Specialization

Teaching Assistant | 10/2020 – present
Faculty of Computer Science, Universitas Indonesia
Courses: Database (Spring 2021), Programming Foundation 2 (Fall 2020), Discrete Math IUP (Present)
- ❖ Discrete Mathematics (International Undergraduate Program): Helping the vice-dean of faculty, Ari Saptawijaya S.Kom, M.Sc., Ph.D. to prepare class materials and tutor all students in the Computer Science IUP cohort
- ❖ Programming Foundation: Tutored a group of 7 sophomores twice a week to practice coding in java (OOP, Junit Testing (TDD), IO, Exception, Generics, JavaFX) and revise materials. Conducted demo sessions, created, graded coding assignments, built automated class attendance recap with Python pandas and Google script, and reported directly to Dr. Ade Azurat, S.Kom.
- ❖ Database: Held biweekly tutorial sessions to teach PostgresQL in practice, assisted students to fully grasp classes materials through synchronous sessions, created course assignments and projects, graded students' assignments and quizzes, and reported directly to Ms. Mei Silviana Putri, S.Kom., M.Kom.

Data Engineer Intern | 10/2020 – 04/2021
OVO (PT Visionet Internasional), Indonesia
OVO is a leading Indonesian payment, rewards, and financial services platform in more than 300 cities in Indonesia
- ❖ Built and designed an anomaly detection system using machine learning one-class SVM and statistical model to detect anomalous ingestion and successfully increased the team's ETL surveillance
- ❖ Built data pipelines from multiple data sources (Postgres, MongoDB, API) to a data warehouse, build unit test, write documentation
- ❖ Managed data warehouse, cater ad-hoc data ingestion from various data sources (sftp, hive, etc.) for other divisions

Tech stacks that I used: Python, PySpark, MongoDB, Apache Airflow, Hive, PostgreSQL, MySQL on top of Cloudera

Data Scientist Intern | 08/2020 – 09/2020
Asia Technology Venture Pte Ltd, Singapore
- ❖ Built a LinkedIn scraping engine with Python selenium and JavaScript to filter out profiles searches based on keywords: type of connections, interests, location, and industry and writes the result to a CSV
- ❖ Built API documentation using Swagger API
- ❖ Implemented API design with Flask

Website CMS Developer | 01/2019 – 12/2019
Indonesia Model United Nations and UI Model United Nations Club
Designed and developed *uimunclub.ui.ac.id* and *IndonesiaMUN.org* with WordPress CMS by integrating various plugins

PROJECTS

SQNA: Smart Question Answer Generator| 8/2021 – 9/2021
sqna.xyz | github.com/alphago-aic
- ❖ A web app that can create automated question-answer pairs from the given test, summarize long text, and answer questions from text using a state-of-the-art NLP model: T5-transformer
- ❖ I fine-tuned the model for days, created the API endpoint, hosted on CE GCP, and achieved >80% of accuracy
Tech-stack: React, Fast API, PyTorch, HuggingFace, Python for Data Science, GCP, AWS

E-KIPI: Smart Monitoring System of COVID-19 Vaccine's Adverse Effect | 4/2021 – 7/2021
github.com/health-troops & ristek.link/kti-mapres
- ❖ Created a mobile-based COVID-19 vaccine side-effects reporting system by integrating Natural Language Processing and Cloud Technology to give users real-time advice 7 days after vaccine injection
- ❖ Implemented Machine Learning features of the app: recommendation generator from text-response, and face mood recognition. I worked on the end-to-end cycle from model creation until client-side deployment
Tech-stack: Android Kotlin, Tensorflow and Keras API, Google Cloud Platform, RESTful API

League of Legends Winning Team Prediction, ML Analytics | 6/2021 - 7/2021
ristek.link/notebooks-ds
- ❖ Predicted the winner of each match between blue vs red team, given variables like heroes used, seasons, win rate
- ❖ Achieved 0,75 F1 Score. Models: ANN, Random Forest, Naive Bayes, KNN models, with various feature engineering techniques

Road Segmentation using Deep Learning UNet and Conventional Model | 11/2020 – 12/2020
academia.edu/46902306/Segmentation_of_Road_in_Aerial_Images_using_Deep_Learning_UNet_and_Conventional_Model | ristek.link/notebooks-imgproc
- ❖ Extracting the road network from Massachusetts roads dataset images by using Deep-learning approach (U-Net) and Non-deep learning approach (Image segmentation and morphological operations)
- ❖ I applied histogram thresholding, morphological operation (opening), and region-based segmentation and achieved 0.105 IoU score
Written in Python with *Skimage* and *OpenCV* library

Helpr: Meal plan and Exercise Recommender System | 10/2020 – 12/2020
sc-helpr.herokuapp.com | https://gitlab.com/sc-alphago/helpr
- ❖ Helpr is a web-based healthy lifestyle planner app that gives users a personalized recommendation on meal plans, physical exercise, and proportional rest hours performed using AI: knowledge-based agent
- ❖ Worked on rest hours and exercise recommendation features, gathered knowledge base and expressed the logic in prolog, connected the front-end with the knowledge base
- ❖ Created the app's concept, proposal, and documentation
Written in Pyswip (Python Prolog Library), Python Flask

Autonomous Driving Car Research Hackathon | 10/2020 – 10/2020
University of Maryland College Park, USA | ristek.link/self-driving-car
- ❖ Participated in a research hackathon in an autonomous driving car group. Assisted by postgrad students, Laura Zheng and Shivam Akhauri
- ❖ Utilized Python Keras and Tensorflow library to train the Artificial Neural Network model to be able to drive itself in a virtual simulator that runs on Unity Game Engine

VOLUNTEER AND ORGANIZATION EXPERIENCE

Data Science Lead, RISTEK Fasilkom UI | 2/2021 – present
linkedin.com/company/ristek-fakultas-ilmu-komputer-universitas-indonesia
- ❖ Regularly train junior members about Data Analytics, Machine Learning, and Deep Learning practical applications in Python
- ❖ Work on a recommendation system project for PMB Fasilkom UI website matchmaking feature. In charge of building API endpoints with FastAPI for the model to communicate with the front-end in a microservice architecture. Achieved more than 300 active users on the app

Vice-Person in Charge of Data Science Academy | 10/2019 – 12/2019
COMPFEST 12, Fasilkom UI | compfest.id
- ❖ Structured the curriculum for a two-weekend data science boot camp with over 500 participants registered annually and collaborated with prominent national start-ups

Computer Science Mentor (Teaching Volunteer) | 6/2019 – 6/2019
Generation Girl Summer Club - generationgirl.org
- ❖ Introduced sixteen high school students into programming with Python for a week during the summer holiday
- ❖ Built teaching materials, exercises, homework, curriculum, and wrote a post-event article on medium

ACHIEVEMENTS

The Most Outstanding Student of Faculty of Computer Science, Universitas Indonesia | 4/2021 – present
A yearly award to one active student in the school considering various aspects such as academic and co-curricular achievements, scientific paper, critical thinking, and public speaking, personal character

Top 50 Project (Semifinalists) | 5/2021 – 7/2021
Bangkit Academy by Google, Tokopedia, Gojek, and Ministry of Education
Selected as one of the top 50 capstone projects out of 500 submissions for our mobile app to solve Indonesia's critical problem by integrating machine learning, cloud computing, and mobile development skillsets

Erasmus+ Scholarship Awardee | 1/2020 – 6/2020
University of Birmingham, United Kingdom
Selected to be a part of Erasmus+ International Credit Mobility program at the University of Birmingham with a 100% scholarship

3rd Winner of Startup Games 2020 | 3/2020 – 3/2020
Birmingham, United Kingdom | https://ristek.link/beauget-visuals
Invented a startup called Beauget, created beauget.com (deactivated), designed marketing ideas, and did a business pitch in front of industry experts

Best Delegate (1st Place) & Honorable Mention (3rd Place) Awards | 2019
Jakarta, Indonesia
Student Energy Model United Nations and International Human Rights Model United Nations

Top 10 Teams, Business Plan Competition, EURECA| 2019
Prasetiya Mulya Business School, Indonesia

SKILLS

Proficient in: Python, Java, SQL, Bash, Hadoop ecosystem, Hive, Impala, Git, Linux, PySpark, TensorFlow, Keras, Python ML libs (SciPy, OpenCV, Scikit-Learn, etc), JavaScript, HTML, CSS, MongoDB, Django, Flask, FastAPI, OpenAPI, Pytorch
Soft skills: Communication, Teamwork, Design Thinking, Marketing, Copywriting, Agile Scrum

Platforms: Hue, Airflow, Tableau, GCP, WordPress CMS, DataGrip, Jira, Confluence, GitLab, GitHub, Jupyter, Cloudera