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SUMMARY

I (20) am a highly-aspiring data scientist who has acquired relevant experiences from prior internships, projects, and school courses. I have produced numerous projects in the area of machine learning, natural language processing, image processing, deep learning, and big data technology. I claim myself a well-rounded individual with a solid technical background and profound social and leadership skills, who majorly 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

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.
- ❖ Selected Student to be Nominated for The University Innovation Fellows Program by Stanford University
- ❖ 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 – 07/2021

Faculty of Computer Science, Universitas Indonesia

Courses: Database (Spring 2021), Programming Foundation 2 (Fall 2020)

- ❖ 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

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

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

- ❖ Extracting 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.

Delicae: Website for Promoting Small-Medium Businesses | 10/2020 – 12/2020

delicae.herokuapp.com | <https://gitlab.com/rpl-5-delicae/delicae/-/tree/develop>

- ❖ Delicae is a dummy web-based application to assist and promote small and medium culinary businesses in Indonesia as a final project for a software engineering class. Built by going through all steps of UML design and agile development.
- ❖ Features I created: Daftar Inkubator, Daftar *On-Demand Service*.
- ❖ Created the app's concept, proposal, and write-ups.

Implemented in Python's Django with SQLite backend

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 match-making feature.

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 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 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, made beauget.com (deactivated), hosted it in GCP, designed marketing ideas, and did a business pitch in front of industry experts.

TECH SKILLS

Proficient in: Python, Java, SQL, Bash

Familiar with: Hadoop ecosystem, Hive, Impala, Git, Linux, PySpark, TensorFlow, Keras, Python ML libs (SciPy, OpenCV, Scikit-Learn, etc), Spark Streaming, Kafka, JavaScript, HTML, CSS, MongoDB, Django, Flask

Platforms: Hue, Airflow, Tableau, Google Cloud Platform, WordPress CMS, DataGrip, Jira, Confluence, GitLab, GitHub, Jupyter, Cloudera