AULIA RAHMAN

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Recent Master of Transportation graduate with over three years of experience in freelance transportation consultancy. Proficient in traffic simulation software, including PTV VISSIM (microsimulation) and PTV VISUM (macrosimulation), along with expertise in Python, SQL, and geospatial modeling. Skilled in statistical analysis and modeling with a strong problem-solving aptitude. Seeking a challenging full-time position to apply my knowledge and skills in transportation engineering and contribute to innovative solutions in the field. Passionate about optimizing transportation networks and enhancing sustainability in urban environments.

EDUCATION

-   Pacmann Academy, AI and ML Engineering (non-degree)   May 2022 – Dec 2023

Ir.   Universitas Gadjah Mada, Engineering Profession   Feb 2023 – Jun 2023
           GPA of 3.36/4.00.

M.Sc   Universitas Gadjah Mada, Transportation   Aug 2021 – Feb 2023
           Thesis: "Development of Open Source Traffic Assignment Library".
           Finishing 24 months program in 18 months.
           GPA of 3.68/4.00.

B.Eng Universitas Gadjah Mada, Civil Engineering   Aug 2016 – July 2020
           Thesis: " Evaluating Road Networks Performance: Capacity Restraint Method "
           GPA of 3.04/4.00.

EXPERIENCE

Indonesia's Directorate General of Highways, Indonesia   Apr 2023 to Oct 2023
Project Officer, Preparation of road and bridge feasibility study documents for Central Java and Yogyakarta provinces.
- Modelling efficient inter province transportation network and urban network using PTV VISUM and PTV VISSIM.
- Modelling level crossing betweel railway and road network using PTV VISSIM.
- Cost-benefit analysis of alternative roads and solutions to minimize cost and traffic accidents.
- Feasibility study of flyover, road sections enlargement, interchange modification and bridge duplication and repair.

Indonesia's Directorate General of Highways, Indonesia   Jan 2022 to Dec 2022
Project Officer, Preparation of road and bridge feasibility study documents for Central Java and Yogyakarta provinces.
- Modelling inter province transportation network using PTV VISUM.
- Cost-benefit analysis of alternative roads to minimize cost and traffic accidents.

Indonesia's Directorate General of Highways, Indonesia   Jan 2021 to Dec 2021
Project Officer, Feasibility study of inter region road network between middle and southern Java Island.

- Modelling inter province road network using PTV VISUM and PTV VISSIM.
- Proposing alternative roads and the cost-benefit analysis of each alternatives

Indonesia's Directorate General of Highways, Indonesia   Jan 2020 to Dec 2020
Project Officer, Development of Urban Road Network Plans in Balikpapan, Mataram, Yogyakarta and Tasikmalaya.

- Modelling urban road network using PTV VISUM and PTV VISSIM.
- Proposing solutions for sustainable transportation network with various scenarios.

PUBLICATIONS

Conference Papers

(Peer-Reviewed)

> Rahman, A.. and Irawan, M.Z., "Evaluating Road Networks Performance: Capacity Restraint Method," 2020, J. Phys.: Conf. Ser. 1655 012099.

> Rahman, A., Irawan, M.Z. and Amrozi, M.R.F, ".A New Approach to Estimating Link Performance on Indonesian Uban Roads: Deriving the BPR 1964 Function," 2023, IOP Conf. Ser.: Mater. Sci. Eng. 1289 012043.

LANGUAGES

English: Professional Working Proficiency. IELTS 7.5 (C1 English Level).

Indonesian: Native

COMPUTER SKILLS

Programming: Python, MySQL.

Geospatial: Geopandas, NetworkX, OSMnx, ArcGIS.

Traffic Softwares: PTV VISUM, PTV VISSIM, SATURN, AMOS.

Data: Pandas, Numpy, Ms Excel, Google Spreadsheets.

Visualisation: MatPlotLib, Tableau.