AULIA RAHMAN

Phone: (+62) 812-6794-9490 Central Residence No. 3A aulia.r@mail.ugm.ac.id Batam, Riau Islands 29444

A recent Master of Transportation degree seeking a PhD under Mr. Robin Lovelace's supervision. Expertise in Python, SQL, and geospatial modeling, with experience in statistical analysis and modeling. Strong problem-solving skills and experience with large datasets using tools such as Tableau.

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 Jan 2023 to Now **Project Officer**, Preparation of road and bridge feasibility study documents for Central Java and Yogyakarta provinces.

- Modelling 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.

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," Proceedings of The 4th International Conference on Transportation Infrastructure and Sustainable Development (TISDIC 2023), Aug. 26-28, 2023, PAPERID-03.

LANGUAGES

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

Indonesian: Native

COMPUTER SKILLS

Programming: Python, MySQL.

Geospatial: Geopandas, NetworkX, OSMnx.

Applications: PTV VISUM, PTV VISSIM, SATURN.

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

Visualisation: MatPlotLib, Tableau.