BAGUS BERNADI SAPUTRA

Hardware Research Engineer | Data Analysis Enthusiast | +62 812 2777 2095 |
Bekasi, West Java – Indonesia 17530 | bagus.bernadi@gmail.com | linkedin.com/in/bagus-bernadi/ | github.com/Bikacu |

A Junior Research Engineer with experience in Reliability Engineering as well as Instrument and Automation Engineering, and a graduate in Control and Instrumentation Engineering. I possess expertise in Research and Development, Automation, Root Cause Analysis, Critical Thinking, Problem Solving, Troubleshooting, Preventive Action, Data Processing, Data Visualization, Continuous Improvement, Teamwork, and Leadership.

I actively pursue courses related to Data Analysis outside of work due to my interest in integrating Engineering and Business skills with data analysis. I believe that through data, we can accurately identify problems and develop solutions that enhance performance, product quality, and user experience.

Furthermore, my experience living in 10 cities across Indonesia and South Korea has enriched my understanding of cultural diversity and various work environments.

WORK EXPERIENCE

LG Electronics Indonesia R&D Center   **Bekasi, West Java – Indonesia**
Hardware Research Engineer   *Sep 2021 - Present*

- As a pioneer employee, I was Involved in setting up testing and research facilities,
- Led the development of UHD TV products for the Asia region,
- Managed the development of over 140 models for the 2024 TV product lineup,
- Collaborated with cross-functional teams and international researchers to develop high-quality products, ensuring each model met or exceeded quality standards while adhering to project deadlines and production schedules,
- Utilized advanced diagnostic tools (Oscilloscope, Avometer, etc.) to identify and resolve issues,
- Actively pursued opportunities to improve component efficiency, enhance product performance, and optimize user experience.

PT. Indah Kiat Pulp and Paper   **Perawang, Riau – Indonesia**
Instrument and Automation Engineer   *Mar 2021 - Sep 2021*

- Perform predictive, proactive, corrective, and engineering maintenance on control instruments such as sensors, actuators, PLCs, and DCS systems to minimize downtime and improve efficiency in the Paper Mill.

Electrical Reliability Engineer   *Jan 2019 - Mar 2021*

- Integrate condition monitoring (including vibration analysis, shaft alignment, and balancing) with electrical inspections (such as dissolved gas analysis, thermal inspection, and power quality analysis) to perform predictive, proactive, and engineering maintenance. This approach aims to minimize downtime and enhance efficiency across approximately 15 plants in our paper mill, including 9 paper machines, 3 folio sheeters, and 3 cut-size units.
- Get appreciation for reducing electrical loss time caused by thermal issue from 1.148 minutes in 2018 to 312 minutes in 2019.

Graduate Trainee   *Jul 2018 - Jan 2019*

- Training in Paper Making Process, Instrument and Automation, Folio Sheeter Process, Cut Size Process, and Paper Supply Chain Process.

Department for Youth and Sports Affairs   **Semarang, Central Java - Indonesia**
Liaison Officer for Youth Olympic and Sports Affairs   *Feb 2017*

- Served as the primary point of contact for event coordination, managing accommodation, match information, and communication for karate contingents. Ensured smooth operations and addressed any issues to facilitate an optimal experience for participants.

Indonesian National Institute of Aeronautics and Space (LAPAN – Rocket Tech. Center)   **Bogor, West Java - Indonesia**
Internship   *Feb 2015*

- Studied the organizational systems and work culture at LAPAN while conducting research on antenna trackers for detecting moving objects.

EDUCATION EXPERIENCE

Diponegoro University   **Semarang, Central Java - Indonesia**
Bachelor Degree in Electrical Engineering, GPA 3.14/4.00   *Sep 2013 - Mar 2018*

- **Finalist Internet of Things Competition** by ICON+ (2016).
  Create acquisition data from electrical panel distribution using SMS Gateway.
- **Recipient of Research Proposal Funding** in the Diponegoro University's Student Research Program (2016).
  Research in precent Contra-Rotating on Electric Ducted Fan (EDF) Rocket.
- **Recipient of Entrepreneurship Proposal Funding** in the Ministry of Research and Education's Student Creativity Program (PKM-K) (2016).
  Make kroto cultivation as business opportunity.
- **Head of Diponegoro University Rocket Team** (Jan 2016 – Jan 2017).
  I led a team in the research and development of Rocket Payloads and an Electrical Ducted Fan (EDF) Rocket in preparation for the Indonesian Payload Rocket Competition (KOMURINDO), organized by LAPAN.
- **Recipient of Research Proposal Funding** in the Ministry of Research and Education's Student Creativity Program (PKM-KC) (2015).
  Create innovation from lamp using Laser Diode and Phosphorescence.
- **Finalist Oppo Idea Innovation Competition** by Oppo (2015).
  Make smart system to control kroto house and ease kroto breeder.
- **Member of 1st Committee in Diponegoro University Legislative Council of Student** (Jan 2015 – Jan 2016).
- **Member of Treasurer Department in Diponegoro University Legislative Council of Student** (Jan 2014 – Jan 2015).

SKILLS, TOOLS, & OTHERS

Soft Skills: *Leadership, Team Management, Critical Thinking, Teamwork, and Problem Solving*.

Engineering Skills: *Troubleshooting, Root Cause Analysis, Preventive Action, Continuous Improvement, Automation, Research and Development, Thermography, Oscilloscope, and Avometer*.

Data Analysis Skills: *Data Workflow, Data Processing, Exploratory Data Analysis (EDA), Data Visualization.*

Data Analysis Tools: *MySQL, Google BigQuery, Spreadsheet, and Looker Studio.*

Programming Languages: *Python, SQL.*

Certification and Courses: *Bahasa Indonesia as Native Language, EF SET English 55/100 (B2 Upper Intermediate) (2024), Fundamental Excel by Coding Studio (2024), Excel Intermediate by Coding Studio (2024), Excel Advanced by Coding Studio (2024), Fundamental Algorithm by Coding Studio (2024), Fundamental Python by Coding Studio (2024), Fundamental Database MySQL by Coding Studio (2024), Fundamental Data Science by Coding Studio (2024), Fundamental Python by CODEPOLITAN (2024), Fundamental GIT by CODEPOLITAN (2024), Mini Course Data Analytics by RevoU (2024).*