

# RISKA DERLIANA PURBA

Batam, Indonesia | +62 82286405401 | riskaderliana@gmail.com |  
<https://www.linkedin.com/in/riskaderlianapurba/>

## EDUCATION

---

### Politeknik Negeri Batam - Batam, Indonesia

*Bachelor of Applied Mechatronics Engineer* | 3.91 GPA

09/2020 to 04/2024

## JOB EXPERIENCE

---

### Metronarc Technology Pte. Ltd. - Batam, Indonesia

*Product Design and Development Engineer*

04/2024 to present

- Develop innovative product concepts based on market research and customer feedback analysis.
- Improved product performance through rigorous validation testing and iterative design revisions.
- Create prototypes based on user feedback during beta testing and refine the final design before mass production.
- Coordinated with marketing teams on promotional materials that accurately portrayed key features and benefits of the developed products.

### Sumitomo Wiring System Batam Indonesia - Batam, Indonesia

*Assembly Improvement Analyst Intern*

07/2023 to 03/2024

- Organized the production process by setting measurable goals for finished goods, minimizing downtime by 3% per day, and optimizing labor allocation, resulting in a 5% increase in overall production efficiency.
- Analyzed root causes of decreased efficiency and root causes of increased defect rates.
- Identified areas for process improvement, resulting in an overall increase in team productivity.
- Monitored line efficiency metrics.

## AWARDS

---

### National Competition E-TIME, 7<sup>th</sup> Semester, 2023

Participant in Programmable Logic Controller (PLC) category using the TM221 Schneider PLC model at Jakarta State Polytechnic.

### 35<sup>th</sup> Pekan Ilmiah Mahasiswa Nasional (PIMNAS), 5<sup>th</sup> Semester, 2022

Participant in (PKM-KC) category at Universitas Muhammadiyah Malang.

### Winner of Project Based Learning (PBL) EXPO, 5<sup>th</sup> Semester, 2022

First place winner in the Internet of Things category at the PBL EXPO held at Politeknik Negeri Batam.

### Funding Recipient Program Kreatifitas Mahasiswa (PKM)-KC, 5<sup>th</sup> Semester, 2022

Karsa Cipta category with the project title "Rawai Pintar Alat Bantu Nelayan Mendeteksi Tarikan Ikan serta Lokasi dengan Efisiensi Waktu dan Bahan Bakar yang Terintegrasi Smartphone".

### Funding Recipient Program Kreatifitas Mahasiswa (PKM), 5<sup>th</sup> Semester, 2022

Karya Inovatif category with the project title "Sistem Timbangan Analisa Tumbuh Kembang Bayi untuk Deteksi Dini Stunting Nasional Menggunakan Metode Z-Score Berbasis Internet of Things".

### Outstanding Student of Batam Polytechnic, 5<sup>th</sup> Semester, 2022

Passed the PKM National and PIMNAS funding in the innovative work category.

## PROJECT EXPERIENCE

---

### SPARK "System Monitoring Machine Welding"

*LoRa Communication, Mechanical and UI Design*

10/2022 to 06/2023

- Developed a system capable of transmitting data over a distance of up to 2.2 km using the LoRa communication system.

- Designed a portable and easy-to-implement mechanical tool.
- Created an attractive and user-friendly interface.

### **Timbangan Bayi Berbasis Internet of Things**

*Microcontroller Programming and Electrical*

10/2021 to 08/2022

- Calibrated sensors and transmitted sensor data to Firebase database.
- Wired electrical components.

### **Alat Pendeteksi pH Air pada Tambak Ikan**

*Microcontroller Programming and Electrical*

01/2021 to 08/2021

- Wired electrical components.
- Programmed and calibrated pH E kit 201-C sensor.

## **CERTIFICATIONS**

---

**Programmable Logic Controller – Badan Nasional Sertifikasi Profesi (BNSP)**

11/2023 to 11/2026

Credential ID 26510311400000112023

**Competence SMEs and Entrepreneurs – Badan Nasional Sertifikasi Profesi (BNSP)**

12/2022 to 12/2025

Credential ID 47000122000219982022

**Learn Schneider Plc Programming with TM221 – Udemey**

06/2023

Credential ID UC-f6260e24-76bc-4707-8c26-890ea4bf043e

## **SKILLS**

---

**Hard Skills:** Troubleshooting, Product Testing, 2D and 3D modelling, Electrical Engineering, Prototype Development.

**Software Skills:** SolidWorks, Arduino IDE, SoMachine, CX-Programmer, EcoStruxure Machine, Microsoft Office.

## **ORGANIZATION EXPERIENCE**

---

**Himpunan Mahasiswa Elektro (HME)**

03/2021 to 01/2022

Member of Departement Skill and Quality

- Committee for the "Pengaderan Elektro" 2021
- Committee for the Robotic Contest 2021