


# Kiran De Roy

Betekom • kiran@litrik.com • +32 487 58 92 98 •  LinkedIn • 17/06/2002



## Education

---

**KU Leuven: Group T**

Sept 2024, June 2025

MSc in Electronics-ICT: Software Systems

- Coursework: C++ , Machine Learning, Cybersecurity, Distributed Systems

**KU Leuven: Group T**

Sept 2020, Feb 2025

BSc in Electronics-ICT: Smart Electronics and Software

- Coursework: Operating Systems, Object-Oriented Programming, Web Development

**KAMSA Aarschot**

Sept 2014, June 2020

Science and Mathematics

## Research

---

**Master's Thesis – Real-Time Pelvic Rotation Detection Using Machine Learning** Sept 2024, June 2025

Developed machine learning models for real-time pelvic rotation detection to address lower back pain, achieving 95% weighted F1-score using MS-TCN++ temporal model on IMU sensor data.

**Technologies:** Python, Scikit-learn, Pandas, NumPy, Tensorflow, PyTorch, CUDA

## Skills

---

**Languages:** Java, C++, C, Python, SQL

**Tools/Frameworks:** Symfony, Git, React, Firebase, QtCreator, IntelliJ, Figma, Ubuntu

**Languages:** Dutch (native), English (fluent)

## Projects


---

**Automatic Chessboard with Lichess Integration**

 [Source Code](#)


- Built an automatic chessboard powered by ESP32-S3 using CoreXY mechanism and electromagnets
- Integrated with Lichess API via React web app
- Tools: ESP-IDF (C), React, Stepper Motor Drivers, CoreXY Kinematics
- Awarded **Best Student Project 2024**

### **Student Freelancing SaaS Application: UniGigs**

 [Source Code](#)

- SaaS web app for students to offer and find freelance gigs
- Authentication, file storage via Firebase, payments via Stripe
- Tools: React, TypeScript, Firebase
- Awarded **Most Technically Advanced SaaS Application 2025**

### **Distributed Food Ordering System**

 [Source Code](#)

- Microservices-based food ordering platform with 2PC transactions
- Designed REST APIs, monitoring services, deployed to Azure
- Tools: Java, Spring Boot, REST APIs, Maven, Azure, GitHub Actions

Check out my **website** for videos, screenshots and a comprehensive list of other completed projects.

### **Other Experience**

---

#### **Student Job, Delhaize**

July 2019, July 2021

- Operated the cash register
- Restocked shelves