## **Dawit Kiros Redie**

#### Researcher

dawit.k.redie@gmail.com/@ntnu.no linkedin.com/in/dawit-kiros/ github.com/Dawitkiros Norway, Trondheim

Passionate and skilled Researcher with a strong background in Python and data structures. Proven ability to solve problems creatively and efficiently, with a focus on quality and attention to detail. Collaborative and team-oriented, with a belief that "two heads are better than one."

### **SKILLS**

**Programming Languages** Python, C++, Java, Scala Soft skills Communication, Leadership

Research Interests Machine Learning, Privacy Preserving AI, Medical Image Processing

## **TECHNICAL EXPERIENCE**

Ph. D. Researcher December 2023 — Present

NTNU: Norwegian University of Science and Technology

Norway, Trondheim

Working on developing innovative privacy-preserving and personalized federated learning models.

**Data Engineer Intern** 

Johnson Controls

January 2023 — July 2023 India, Pune

- Created a data loss detection system using Spring Boot framework, automating 12 hours of manual work.
- Reduced data processing time by 50% by transitioning spark jobs to PySpark.
- Engineered a synchronization system between Snowflake and PostgreSQL databases, ensuring seamless data flow.
- Developed a model to predict equipment failure based on historical data, reducing downtime and maintenance costs.

#### Teacher Assistant

September 2022 — January 2023

India, Bhubaneswar KIIT University

- Assisted teachers in managing classroom behavior, leading to improved classroom discipline and reduced disruption.
- Facilitated instruction for individuals, groups, and entire classes.
- Led the design and delivery of an engaging curriculum on data structures in C++ and Python, equipping students with practical skills and deepening their understanding of complex concepts.

#### Research Intern

July 2020 — September 2020

School of Electronics, KIIT University

India, Bhubaneswar

- Acquired knowledge on various artificial intelligence concepts and their application in the power electronics field.
- Enhanced my understanding of integrating AI to optimize and innovate within this domain.

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## **EDUCATION**

Ph. D. in Statistical Signal Processing and Machine Learning at Edge,

NTNU: Norwegian University of Science and Technology, Trondheim, Norway

December 2023 - Present

Master of Technology in Computer Science Engineering,

KIIT University, Bhubaneswar, India

August 2023

Bachelor of Technology in Electronics and Computer science Engineering,

KIIT University, Bhubaneswar, India

August 2021

## **PUBLICATIONS**

1. Diagnosis of COVID-19 using chest X-ray images based on modified DarkCovidNet model.

DK Redie, AE Sirko, TM Demissie, SS Teferi, VK Shrivastava, OP Verma, Evolutionary Intelligence, 2022

2. Oral cancer detection using transfer learning-based framework from histopathology images.

DK Redie, S Bilgaiyan, S Sagnika Journal of Electronic Imaging, 2023

## **AWARDS/ACHIEVEMENTS**

#### **Ethiopian Betre-Science Government Scholarship**

August 2017 Ethiopia, Addis Ababa

• Given to top-performing students in their first year at Ethiopian universities for study abroad opportunities.

### KIIT Merit Scholarship

• Given to university Toppers per semester

February 2019 — July 2021 India, Bhubaneswar

## **VICE-CHANCELLOR'S SILVER MEDAL**

 Awarded For Securing the highest CGPA in Electronics and Computer Science Engineering, Bachelor of Technology Program for the year 2021 August 2021 India, Bhubaneswar