#### **Personal Information**

Name: Mooh Ludivine Esther Location: Busan, Republic of Korea Email: esther.ludivine@gmail.com

Phone: +82 010 2192 1190 Nationality: Togolese

Visa Status: D-2 (Student Visa) - Eligible for E-7 sponsorship after graduation (August 2025)

#### Education

## Pukyong National University, South Korea

Master of Science in Information Security (Expected August 2025)

- GPA: 4.42/4.5 | Global Korea Scholarship Recipient
- Research Focus: Post-quantum cryptography, optimizing ML-KEM for constrained environments
- **Key Courses:** Ubiquitous Computing Security, Advanced System Programming, Cryptographic Chip Applications, Data and Algorithms Structure, PKI

### La Trobe University, Australia

**Graduate Certificate in Cyber Security** (2020 - 2021)

• Specialization: Network Security, Risk Management, Digital Forensics

University of Nebraska, Omaha, USA

**Bachelor of Science in Political Science** (2015 - 2017)

• Graduated Cum Laude

### **Research Experience**

Student Researcher, System Security Lab (Sep 2023 - Present)

**Pukyong National University, South Korea** 

- Optimized ML-KEM (Kyber) for better memory and performance.
- Developed Ascon-based cryptographic primitives to replace Keccak in ML-KEM.
- Conducted performance benchmarking of cryptographic implementations in IoT environments.
- Analyzed security properties (IND-CCA2 proofs, collision resistance).

# **Work Experience**

Project Manager (Jan 2020 - Jan 2022)

## **Sauce Site**

- Led a team of developers and designers to manage software projects.
- Improved processes for efficiency and streamlined documentation.
- Managed client communications and technical requirements.

# **Technical Skills**

- Cryptographic Implementations: ML-KEM (Kyber), ECC, Ascon, Keccak, PQM4
- **Programming Languages:** C, C++, Python
- **Security & Optimization:** Post-quantum cryptography, memory & performance analysis, IND-CCA2 proofs
- **Development Tools:** Linux, WSL, Git, Docker (basic familiarity)
- Cryptographic Libraries: OpenSSL, BoringSSL (basic understanding)

## **Publications & Presentations**

- "ECC Accelerator using Faster Montgomery Ladder on FPGA Devices" Busan Cyber Security Conference, 2024
- "Enhancing ML-KEM Performance using Modular Reduction as Macro" MITA 2024

### Languages

- French & Ewe: Native
- English: Fluent (TOEFL Certified)
- **Korean:** Intermediate (TOPIK Level 3)
- Spanish: Intermediate (B1 Level)