**Eunbi Yoon**

**Address : 3680 S Jot Dr, Clarksville, Tennessee, 37040**

**Phone : 931-998-0957 / Email :** [**yinyinbei0717@gmail.com**](mailto:yinyinbei0717@gmail.com)

**Full Stack Flask Web Application (View Scale: 100%, Browser : Chrome)**

Portfolio Website : <http://ec2co-ecsel-tv8n3ehmekpm-2113770561.us-east-1.elb.amazonaws.com:5000/>

LG Customer Video Tutorial : <http://ec2co-ecsel-18wyuowhrfffe-499695824.us-east-1.elb.amazonaws.com:5000/>

GitHub : <https://github.com/EunbiYoon>

**Professional Experience**

**LG Electronics North America, Research and Development Team**

**Development Engineer, Feb 2020 – Present**

* Shippable production python code Developed LG Customer Video Tutorial Web Application deployed with Docker, Docker Hub, Gitlab CI/CD Runner, AWS ECS, EC2 Instances and Application Load Balancer. Built Full Stack Flask Application with Python, CSS and Html and updated code with Gitlab Continuous Integration/automated Continuous Deployment tool. Web page with Jinja2 template and cdn and bootstrap for design html
* Calculated patterns of quality indicators and developed the one click quality analysis app with Python Libraries, Matplotlib, Pandas and PyQt.
* Python Big Data Analysis Query, experience, designing database for structured data
* Programmed automatic messaging system about growing production industry such as quality, sales and cost trend of new product financial model and real-time data monitoring by Python Big Data Analysis technologies and SMTP protocol.
* Created a machine learning algorithm to product defects utilized Convolutional Neural Network(CNN) concept with Python libraries OpenCV, Keras and Tensorflow.

**AI Brain Asia (2017 Datamation Top 20 Artificial Intelligence Companies), Software Development Team**

**Aritificial Intelligence Staff Developer, Dec 2018 – Nov 2019**

* Applied AI Brain company fAutonomy AI class in Unity environment, created a multi-user VR System for Semiconductor AI factory; VR System recognized semiconductor image target and NPC guided design rule
* Performed white and black box test to check the internal structure, operation and input/output values in an Agile/Scrum environment.
* Programmed C# to use the particle system interface for real situation simulation; expressed each particle that reacts differently depending on mass, temperature, pressure, and exposure time in each process.

**Game Programming Laboratory, Kyung Hee University**

**Unity Developer, Jun 2018 – Dec 2019**

* **Virtual Cart Store AR Application :** Developed AR Application for virtual cart in unity 3D HDRP engine and AR API environment; simulated Amazon-Go system as AR App.

**Skills**

**Programming : (Main)Python : 4+ years experience** / **(Sub)**Html, CSS, C++, C#: 2+ years, Javascript : 1 year experience

**Embedded System :** Rasberry Pi, Arduino

**Language :** Native Korean, Fluent English

**Awards & Certifications**

**Awards**

**1. AI remote control Semiconductor factory with mobile 360VR system**

* 1st Award Artificial Intelligence Research Category in Korean Broadcast Media Engineering Association, Dec 2019
* 3rd Award Artificial Intelligence Research Category in Practical Research Association, Dec 2019

**2.  Python Big Data Analysis and AI Vision Software for product quality**

·         1st Award Digital Transformation in LG Electronics North America, Mar 2022

·         2nd Award Best Quality Improvement in LG Electronics, Dec 2021

·         Employee of the month in LG Electronics North Amercia, Mar 2022 & Oct 2021

**Certifications**

·         Semiconductor Fabrication Process Technology, Corporate Support Association, Aug 2019

**Education**

**Kyung Hee University**

**Electronics Engineering Bachelor's Degree, Mar 2016 – Feb 2020**

**1. Software Development Course**

**Object Oriented Programming(Computer Science Class):** C++ syntax major design patterns

**Computer Network(Computer Science Class):** In Cisco Packet Tracer area, OSI reference model, TCP/IP protocol, IP address and subnetting, routing protocol, (default)static routing, distance vector/ link state routing/ trunking protocol, virtual LANs.

**Programming Structure(Computer Science Class):** Data types, variables, functions, branches, loops, recursion, text I/O, arrays and pointers, advanced pointers, logic to perform certain functions and programming in C++.

**2. Semiconductor Device Course**

**SRAM Design Project in VLSI Design (Master Degree Class):** Designed layouts and schematics of 6-transistors 128x8 SRAM with pre-charger, column decoder, sense amp, write driver in H-SPICE environment.

**Semiconductor Integrated Circuit (Master Degree Class):** MOSFET structure, I-V Characteristics, CMOS circuit design, layout design rule, delay estimation, transistor sizing, interconnect, SRAM, DRAM, Flash memory layout, schematic

**Semiconductor Micro-Fabrication:** MOS field effect transistors, materials/crystal structures, quantum mechanics for semiconductor physics(energy band), PN junction diodes, Semiconductor-metal junction