HYUNJIN AN

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Creative problem-solver seeking a software developer internship position to apply my experience gained through adapting Artificial Intelligence (AI) to commercial products and knowledge from cutting-edge technologies research

EDUCATION

Virginia Tech | Blacksburg, VA, USA   *Expected Dec 2023*
- **Major**: Computer Science and Application (Concentration: Software Engineering), M.Eng
- **Coursework:** Software Engineering, Web Programming, Algorithms, Data Analytics, Machine Learning with Big Data, etc.

Pohang University of Science and Technology | Pohang, South Korea   *2009–2011*
- **Major**: Electrical and Computer Engineering (Concentration: Computer Vision/Gesture Recognition - Research), M.S

SKILLS

Proficient: Java, Python **| Familiar:** C, HTML/CSS/JavaScript, SQL **| Tools:** GIT, Docker, Figma, Jira, Zeplin
Web: Vue, RubyonRails **| Mobile:** Android Platform **| Libs:** TensorFlow, PyTorch, Scikit-learn, OpenGL, OpenCV, etc.

PROJECTS

Digital Education Platform for Computer Science (OpenDSA) (Link)   *Web developer*
- Provided algorithm visualization and interactive exercises for students to learn CS-related knowledge easily and customizing tools instructors make their own e-book sites using the 3,817,720 resources on the platform
- Implemented the dashboard using students' usage data in the platform for instructors to check students' learning progress
- Acquired hands-on web development experience to integrate new features to the regency system running 10+ years

Digital Health Service for Female Infertility (LG AI Thermometer)   *Data Scientist*
- Developed a wearable device and mobile application to predict ovulation using basal temperature
- Developed service concept and prototyped the model analyzing with basic temperature using ML libraries
- Received K-FDA (Korea Food Drug Administration) approval and waiting for FDA approval

Smart Home System with Voice Control (LG ThinQ) (Link)   *Project Manager*
- Integrated LG smart home service to external voice assist service (Alexa, Google Assistant, Clova)
- Defined the voice service functions scope, designed the voice interface logic, and tracked development issues
- Launched in North America and Korea and connected 11 types of LG appliances with voice commends

Hand Gesture UX for LG Mobile (LG Gesture Shot) (Link)   *AI Engineer*
- Developed hand gesture interfaces to control the camera embedded LG G-series models
- Modified finger detection algorithm using the connected-component algorithm and ported it to Android platform
- Launched in over 150 countries and sold 800,000 units (LG G3) and 300,000 units (LG G4)

EXPERIENCE

Virginia Tech | Research Assistant   *Mar 2022–Present*
Participated in Virginia Tech digital education platform project and added a new feature using usage data of the platform

LG Electronics | Technical Project Manager   *2014–2018*
Led LG device-based service (LG smart home, LG wearables) from concept to implementation

LG Electronics | Software Engineer   *2011–2013*
Improved LG Artificial Intelligent Platform and applied hand gesture UX to commercial products (LG mobile)

OTHERS

- **US Patent**, "Mobile terminal and method for controlling the same" (US9977590B2), "Method and apparatus for detecting object using volumetric feature vector" (US9020186B2)
- **Master's Thesis**, Hand Gesture Recognition using 3D Depth Data (Link) (2011)
- **Engineering Development Program** in LG Electronics (2015, 2016)