

Andrew (Howon) Kim

Computer Vision Manager

Austintown, OH
howonkim@berkeley.edu
+ 1 (724) 682-0714

I have **diverse experience**, ranging from **building a startup** from its inception to scaling it up and **working in prominent companies**. In my first six months at LG and GM, I greatly achieved the **first prize in a worldwide data analysis competition** and also received Golden Awards for my contributions to smart factory initiatives. My commitment to excellence and innovation drives my success in delivering impactful results.

Education

University of California, Berkeley | Berkeley, CA 2022

- Graduated as Data Science: Applied Mathematics and Modeling with Computer Science and Data Science cores.

Experience

Ultium Cells | **Computer Vision Inspection Manager (L4B)** 10/2024 - Present

Company of General Motors and LG Energy Solution | Lordstown, OH

- Led the optimization of the in-line inspection system, enhancing defect detection accuracy and process reliability — resulting in a production yield increase from 96% to 98%.
- Developed C#/WinUI 3 app for real-time QC; used SQL indexing and queries to speed up historical defect lookup.
- Improved rule-based detection algorithm with deep learning models built from scratch (PyTorch, TensorFlow, Keras), boosting accuracy by 20%+.

Ultium Cells | **Computer Vision Engineer** 04/2023 - 10/2024

Company of General Motors and LG Energy Solution | Lordstown, OH

- Awarded **1st Prize in a global data analysis competition**, showcasing advanced skills in Python and data analysis.
- Experienced with machine learning frameworks and proficient in using various vector databases.
- Strong understanding of advanced manufacturing systems, including **PLC, SPC, and MES**.
- Developed **statistical, deep learning algorithms** for defect detection using terabytes of manufacturing data.

ReviewMe | **ML Model Development and iOS Programming** 09/2020 - 12/2021

eBook Review Platform Startup | Seoul, Korea

- Analyzed brain waves and facial components to develop a deep learning model that evaluates concentration levels, enhancing review systems through facial analysis.
- Proficient in Swift, SwiftUI, MLKit, ARKit, and Vision Framework for building advanced iOS applications.
- Contribute a patent for a Kindle-like review system and recipient of government AI funding.

Samsung Electronics | **ML Model Development and Android Programming (Internship)** 06/2020 - 08/2020

Software Engineer Internship at Android Framework Department | Suwon, Korea

- Researched a machine learning project for automatic sorting of notifications based on situational importance.
- Analyzed and optimized Samsung frameworks using Kotlin and Java to improve performance and functionality.
- Skilled in Git, documentation, and agile development practices; led weekly sprint planning sessions for intern team.

AltoyGames | **Unity3D Game Engineer and Co-Founder** 01/2020 - 06/2020

Game Studio Startup | Suwon, Korea

- Game development in Unity 3D and C#. Developed core components and algorithms from 2D to VR styled games.