4624 Rhode Island Drive
Austintown, OH
44515
United States

# Andrew Kim
Software Engineer

(408) 628-2000
career@howon.kim
linkedin.com/in/howonkim
github.com/howon-kim

**University of California at Berkeley**, Bachelor, Data Science, Dec 2022

- Coursework: **Data, Inference**, **and Decisions**, Introduction to **Artificial Intelligence**, Introduction of **Database Systems**, **Software Engineering**, Principles & Techniques of Data Science, **Linear Programming** and Network Flows, Nonlinear and Discrete **Optimization**, Concepts of **Probability**, **Linear Algebra**, Data Structures and **Programming Methodology.**

*Experience*

Ultium Cells (GM), OH          **Computer Vision Engineer**          August 2023 - Present
**Python, TensorFlow, Pytorch, C++, Spotfire**

- Analyzed terabytes of data on Electrode Inspection to develop statistical models.
- Developed deep learning algorithms for vision-based defect detection from images.
- Utilized various optical techniques and camera systems including Keyence, Cognex, Basler.
- Awarded 1st Prize in a Global Data Analysis Competition by LG Energy Solution.
- Possess a systematic understanding of advanced manufacturing systems including PLC, SPC, and MES.

Ultium Cells (LSP), OH          **Computer Vision Engineer**          April 2023 – August 2023
**C++, Python**

- Utilized camera systems including Keyence, Cognex, Basler to create custom vision inspection software.
- Integrated and optimized APIs of camera systems, enhancing functionality and streamlining workflows.
- Leveraged programming skills in C++, MFC, WPF, and Python to deliver high-quality software solutions.
- Developed deep learning algorithms utilizing large-scale data sets during manufacturing procedure to effectively identify defects in battery images.

Hewlett Packard Enterprise, CA          **HPC Software Engineer**          January 2023 – February 2023

- HPC engineer at National Energy Research Scientific Computing Center at Berkeley Lawrence Laboratory.

ReviewMe, Korea          **Chief Technology Officer**          September 2020 – December 2021
**Python, TensorFlow, Pytorch, Keras, Swift, SwiftUI**

- Developed a custom deep learning model to evaluate human's concentration level using facial components and brain waves. Facial analysis software is developed by Swift using MLKit, ARKit, and Vision frameworks.
- Work as product manager with deeper understanding of various technology stacks work with external team.
- Granted government AI funds for its patent of book recommendation system and machine learning model.

Samsung Electronics, Korea          **Software Engineer Internship**          June 2020 – August 2020
**Java, Kotlin, Python**

- Researched machine learning project optimizing notifications for efficient categorization and delivery.
- Analyzed and optimized the legacy code of the Android framework.
- Experienced in Git, documentation, agile development, and effective communication with team members.
- Led weekly intern sprint planning sessions and daily stand-up meetings to manage milestones, prioritize tasks, and ensure timely completion of deliverables.

AltoyGames, Korea          **Cofounder / CTO**          January 2020 – June 2020
**C#, Unity 3D**

- Developed core components of game algorithm in C# and Unity 3D.
- Developed first VR static FPS game to reduce eye strains and enhance gaming experience.