

# Hee Hwang

<https://www.heehwang.com>

## EDUCATION

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**University of Massachusetts, Amherst**  
Master of Science in Computer Science; GPA: 3.94/4.0

Amherst, MA  
Aug 2019 – May 2021

**University of California, Los Angeles(UCLA)**  
Bachelor of Science in Computer Science

Los Angeles, CA  
Sep 2012 – Jun 2015

## EXPERIENCE

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### Fortinet

Senior Manager, Mobile Software Development  
Manager, Android Mobile Software Development  
Android Mobile Software Engineer

Sunnyvale, CA  
Feb 2025 - Present  
Feb 2024 - Feb 2025  
Mar 2023 - Feb 2024

#### Responsibilities

- Determine what features to prioritize and how to deliver them within the given timeframe.
- Flesh out design and implement required features. Build prototypes to address uncertainties or unidentified issues.
- Set up development process with Scrum. Lead and mentor team members. Review and test their code.
- Get alignment with multiple stakeholders including product, design, development, QA, DevOps, and security team.

#### Achievements

- Led mobile developers and shipped three apps (two built from scratch). Mentored two new grad engineers into self-directed, high-performing contributors.
- Shipped **FortiExplorer Go (App Store/Google Play)** to monitor, manage, and configure Fortinet network devices.
  - \* Spearheaded and built core features including OIDC (OAuth2) authentication/authorization, device registration, monitoring, and management of Fortinet firewalls and routers.
  - \* Designed and developed a unified app by consolidating functionalities from FortiAuthenticator, FortiOS, FortiGuard, FortiGateCloud, and FortiEdgeCloud, improving usability and simplifying system maintenance.
  - \* Implemented Bluetooth communication to configure Fortinet devices from the mobile app.
- Launched **FortiEDR (Google Play)** with integrated web and app protection, centrally managed via FortiEDR Cloud.
  - \* Web Security: Designed and implemented URL filtering using VpnService to intercept DNS traffic, block unsafe sites, and report events to the EDR server.
  - \* App Security: Architected and implemented periodic and on-demand app scanning using WorkManager, a local AV engine, and cloud-based checksum verification, with centralized reporting.
  - \* Drove integration and collaboration across multiple development and cross-functional teams (development, QA, design) for AVEngine, FortiEDR, and FortiClient.

### Bosch Security Systems

Software Engineer

Pittsburgh, PA  
Oct 2021 - Feb 2023

#### Responsibilities

- Worked in an Agile environment with daily scrums. Implemented features for embedded Android devices.
- Reviewed and tested code, tackled ambiguous problems, and aligned solutions with cross-functional teams.

#### Achievements

- Developed and released **Integrators' ToolKit** that captures machine-learning-detected surveillance events and transmits them to external VMS systems on embedded Android devices.
- Boosted ML object detector frame rate from 15 to 30 FPS by analyzing execution paths, splitting processes, and offloading CPU-intensive operations from Java to C++.
- Measured and benchmarked ML object detection model performance on embedded Android devices using TensorFlow Lite. Ported TensorFlow benchmarking tools to Android.
- Accelerated CI pipeline from 16 to 8 minutes by identifying and removing 10GB of unused modules from the Docker image.

### Samsung Electronics

Software Engineer, Android Framework

South Korea  
Feb 2017 - May 2019

- Published **Nice Catch** to capture system notifications, including toasts, vibrations, and screen wake events.
- Extended AccessibilityManagerService to provide minimum input threshold and touch blocking feature.
- Hardened and improved Android system libraries including AccountManager and SyncManager.