# Wonjae Kim

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## EDUCATION

**University of Maryland College Park**                                                College Park, MD
*Bachelor of Science in Computer Science, Minor in Business*                  *Expected to Graduate in May 2026*
- **Honors:** 2023-2024 Dean's List
- **Courses:** Algorithms, Application of Linear Algebra, Artificial Intelligence, Computer and Network Security, Applied Probability and Statistics, Organization of Programming Languages, Data Science, Discrete Structures

## EXPERIENCE

**NEMO Research Assistant**                                                        Feb 2025 – Present
*Research Assistant*                                                                 *College Park, MD*
- Optimized parallel algorithms in C/C++ stellar dynamics code, boosting simulation performance
- Ported core modules for cross-platform compatibility, ensuring seamless functionality on both Windows and macOS

**Hancom – Cross-Platform Transition**                                             Jun 2024 – Aug 2024
*Software Engineer Intern*                                                            *South Korea*
- Spearheaded the end-to-end **migration** of iOS and Android applications to **Flutter**, significantly improving cross-platform compatibility and increasing development **efficiency** by **30%**
- Collaborated with **6 developers** & **3 designers** to build hi-fi prototypes, improving integration and functionality
- Assisted the team in enhancing development processes, delivering project **milestones 15% ahead of schedule**

**GIT – Automobile Diagnostic Solution**                                           Jun 2019 – Aug 2019
*Software Engineer Intern*                                                            *South Korea*
- Worked on **advanced automotive diagnostics** targeting next-gen safety and eco-friendly technologies
- Developed advanced **electric vehicle diagnostics**, aligning with trends in autonomy and connectivity.
- Improved **vehicle performance**, **quality**, and **inspection technologies** by implementing strategic enhancements

## PROJECTS

**AI Couple Compatibility Scoring System** | *Python, TensorFlow, AWS, Django*          Dec 2024 – Feb 2025
- Built a **TensorFlow** AI model for couple compatibility, trained on **50,000+** labeled images with **95% accuracy**
- Designed **real-time scoring APIs** with Django and AWS, integrating embedding-based similarity measures
- Delivered responsive AI-powered UX for web and mobile using **React**, and **Flutter**

**Human-to-Animal Facial Resemblance Classifier AI** | *Python, TensorFlow, OpenCV*     Jan 2024 – Mar 2024
- Trained an AI model using **CNN** and **U-Net** to classify human faces into animal-like categories
- Automated dataset creation, collecting and **preprocessing 10,000+ images** with face detection and augmentation
- Enhanced model performance through **batch normalization, dropout layers**, and **reducing overfitting**

**August** | *Software Engineer, Flutter Lead Developer*                              Jun 2023 – Present
- **Co-founded** and led development of 'August', a college scheduler app for Android and iOS using **Flutter**, with a focus on user-friendly interface and **cross-platform compatibility**
- Created an innovative scheduling algorithm analyzing available slots, open seats, and user preferences
- Integrated **20+ RESTful APIs** and utilized web scraping for real-time data from school websites
- Acquired essential skills in all steps of MVP release, Beta testing, and skills in collaboration

## LEADERSHIP

**Korean Teaching Assistant (TA)**                                                 Aug 2023 – May 2024
*University of Maryland College Park*                                                 *College Park, MD*
- Conducted Korean language and culture classes for **20+ students**, using interactive methods to boost proficiency
- Coordinated with faculty to design and update curriculum, ensuring alignment with educational standards

**Front Observer & DMZ Police**                                                    Jan 2021 – July 2022
*Republic of Korea Army*                                                              *Paju, South Korea*
- Served 5 months at the **DMZ** as a front observer with the **1st Artillery Division** in a high-security border zone
- Promoted to **Sergeant**, led team operations, and received an **honorable discharge** for **discipline** and **dedication**

## TECHNICAL SKILLS

**Languages**: Java, Python, Flutter, Dart, Swift, C, JavaScript, HTML/CSS, MIPS, OCaml, Rust, React, TailwindCSS
**Developer Tools**: VS Code, Visual Studio, Eclipse, Android Studio, Xcode, Matlab, Grace