

Junho Andrew Choi

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EDUCATION

University of California, Berkeley

Expected May 2027

Bachelor of Arts (B.A.)

- Majors: Data Science, Integrative Biology; Berkeley Certificate in Design Innovation
- Coursework: Data Structures, Principles & Techniques of Data Science, Probability for Data Science, Optimization Modeling, Structure and Interpretation of Computer Programs, Multivariable Calculus

SKILLS

- Programming Languages: Python, Java, SQL
- ML/DS: PyTorch, Scikit-learn, NumPy, Pandas, EDA, Feature Engineering, Model Evaluation
- Systems/Tools: Git, React, Vite, Figma, Jupyter, Microsoft Office Suite, Photoshop
- Foreign Languages: Korean, Mandarin

RELEVANT EXPERIENCE

Data Analytics Intern at **Asan Medical Center (AMC)**, Seoul, Republic of Korea

May 2025 ~ Aug. 2025

- Processed and analyzed high-dimensional clinical datasets using Python and Jupyter to identify key data patterns, which informed feature selection and improved team strategy in a multi-institutional classification challenge to place 7th
- Built automated data preprocessing pipelines for 3D medical imaging and clinical records to streamline data preparation across multiple modalities, reducing manual processing time for the research team
- Implemented interpretability techniques (SHAP, Grad-CAM) to validate model outputs and communicate feature importance to non-technical stakeholders, increasing trust in data-driven clinical predictions

IT Consultant for **Mozilla Firefox**, Invention Corps of Berkeley

Aug. 2025 ~ Feb. 2026

- Engineered a Firefox performance monitoring extension using React and Vite that tracked, filtered, and sorted 50+ concurrent tabs by memory and CPU usage in real time, helping users identify and manage high-resource processes
- Led user research through surveys to assess Adaptive Performance perceptions, analyzing feedback to translate user needs into feature requirements and UI designs in Figma, collaborating with 12 team members across frontend and backend tracks

PROJECTS

Data Science & Optimization Projects

- AI Tactical Assistant
 - Designed and trained a neural network using PyTorch to predict match outcomes from collected historical player and team data, improving prediction accuracy through feature engineering and hyperparameter tuning
 - Built a constrained optimization system using PuLP linear programming to automate team formation decisions based on model predictions, which led to winning a 6v6 soccer league
- Geospatial Route Optimizer
 - Developed a route optimization engine using depth-first search with branch-and-bound pruning to compute pairwise distances across 200+ real-world coordinates, identifying globally optimal traversal paths to minimize total travel distance

Machine Learning & Classification Projects

- Heart Disease Predictor
 - Built an end-to-end data pipeline to classify cardiovascular risk using the UCI Cleveland dataset by implementing data preprocessing, feature engineering, and model selection, achieving 87.3% accuracy while prioritizing recall to reduce missed diagnoses of at-risk patients
- Spam Classifier
 - Developed an email classification system using the SpamAssassin dataset by performing exploratory data analysis and feature engineering on 8,000+ examples, optimizing precision-recall tradeoffs to minimize false positives and improve filtering reliability

LEADERSHIP & AWARDS

Non-Commissioned Officer at **US 8th Army 2ID HHBN**

Sep. 2022 ~ Mar. 2024

- Led a platoon of 40+ soldiers as a bilingual Korean-English Platoon Leader, translating and delivering ACFT training and basic military coursework, resulting in a 96% pass rate across the entire platoon
- Awarded **US Army Certificate of Achievement** (Mar. 2024) for outstanding leadership and bilingual communication