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: Machine Learning, Data Engineering, Data Structures, Principles & Techniques of Data Science, Optimization Modeling, Probability, Structure and Interpretation of Computer Programs, Multivariable Calculus

SKILLS

- Programming Languages: Python, Java, SQL
- ML/DS: PyTorch, NumPy, Pandas, Scikit-learn, EDA, Feature Engineering
- Systems/Tools: Figma, Git, React, Vite, Photoshop, MS

RELEVANT EXPERIENCE

Undergraduate Researcher, Abbasi Lab, **UCSF** Sep 2026 ~ Present

- Developing an LLM-based EHR summarization pipeline at UCSF, auditing retrieval over a large-scale synthetic EHR database (2M+ clinical records) and designing a claim-level grounding evaluation framework to measure and reduce hallucination in clinician-facing outputs.

Data Scientist, AI Engineering Team at **SmartMind AI**, Seoul, Republic of Korea May 2026 ~ Aug 2026

- Initiated and led a natural-language-to-SQL pipeline on a live enterprise ERP system, mapping the 6 core tables of 20 required for coverage and replacing single-run pass/fail testing with a multi-trial measurement design over a fixed golden set of query scenarios, reporting a measured pass rate with run-to-run variance
- Traced silently failing queries back to the Neo4j ontology (ApeRAG/Qurify) that supplied the model its schema and business knowledge, auditing entity-merge accuracy and similarity thresholds to surface missing and duplicate nodes, and corrected errors in the reference answer key by reconciling output against source financial statements

AI Researcher at **Asan Medical Center (AMC)**, Seoul, Republic of Korea May 2025 ~ Aug. 2025

- Ran large-scale exploratory analysis in Python and Jupyter for the VLM3D Multi-Abnormality Classification Challenge, identifying the data patterns that informed feature selection and a strategy placing 7th among multi-institutional teams
- Developed and fine-tuned PyTorch deep learning models (3D U-Net, ResNet3D) for medical imaging and multimodal deep survival model for hepatocellular carcinoma, using SHAP and Grad-CAM to validate feature importance

User Research & Design Consultant at **Invention Corps of Berkeley**; Berkeley Consulting Collaborative Jan 2025 - Present

- **Mozilla Firefox**: structured a five-theme survey instrument with a 12-person team and analyzed responses into the feature requirements behind a shipped React and Vite extension tracking 50+ concurrent tabs by memory and CPU usage
- **Braven**: cleaned and visualized survey data with an 8-person team, then re-segmented by class year, producing four cohort personas that drove the wireframes and 6 production-ready mobile screens delivered in Figma

PROJECTS

- **Multi-Agent Ad Generation System**: built an 8-agent large language model pipeline generating on-brand ads from audience data, where agents exchange a versioned JSON spec rather than prose and a brand-guardian agent hard-vetoes on deterministic color and layout gates
- **AI Tactical Assistant**: trained a PyTorch model on collected historical player and team data to predict match outcomes, then fed those predictions into a PuLP linear-programming optimizer that generated optimal formations, used to win a 6v6 league
- **Activation Domain Prediction Pipeline (Deep Learning for Protein Classification)**: developed a CNN-BiLSTM model classifying transcriptional activation domains from protein sequences with sliding-window feature engineering, SHAP interpretability, and unsupervised K-means clustering, reaching F1 = 0.95 across 10 distinct subclasses

LEADERSHIP & AWARDS

Non-Commissioned Officer at **US 8th Army 2ID HHBN** Sep. 2022 ~ Mar. 2024

- Led a platoon of 40+ soldiers as a Platoon Leader, assisting ACFT training, resulting in a 96% pass rate across platoon
- Awarded **US Army Certificate of Achievement** (Mar. 2024) for outstanding leadership and bilingual communication

Team Captain of **Cal Galacticos** | UC Berkeley Intramural Competitive Soccer ~ Present

- Captained the largest Korean soccer team in Berkeley, recruiting new members, managing events/social media, and team logistics across competitive seasons