

Justin He

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EDUCATION

University of California, Los Angeles (UCLA) <i>B.S. in Computer Science, B.S. in Applied Mathematics</i>	Sep. 2020 – Mar. 2024 <i>Los Angeles, CA</i>
<ul style="list-style-type: none">• GPA: 4.0/4.0; <i>summa cum laude</i>; Phi Beta Kappa• Activities: Grader for Programming Languages, Databases; Leadership for Upsilon Pi Epsilon	

EXPERIENCE

Software Engineer <i>Meta</i>	Apr. 2024 – Present <i>New York, NY</i>
<ul style="list-style-type: none">• Facebook Scam & Trust; Tech lead for ML modeling/infrastructure for scam detection on FB Dating Integrity• Owned end-to-end development and training of production scam detection models, spanning scam trend research, feature engineering, offline evaluation, and online inference; reduced scam view prevalence by 70%• Re-architected model-serving infrastructure handling 150M+ daily users, introducing caching, batching, and rate limiting to cut direct inference volume by 98%, reduce compute spend by \$200k/yr, and enable multi-model serving• Led development of user-facing trust feature, coordinating across 18 cross-functional stakeholders. Achieved 20% adoption in 30 days and scaled into a company-wide trust initiative• Drove collaboration with 12 engineers to define and execute a multi-half roadmap to unify Facebook-wide integrity infrastructure, reducing system fragmentation and improving reliability and operational maintainability	
Software Engineer Intern <i>Citadel Securities</i>	Jun. 2023 – Aug. 2023 <i>New York, NY</i>
<ul style="list-style-type: none">• Trading Ecosystem, focused on optimizing trading infrastructure performance• Built distributed tracing services across order execution infrastructure to enable real-time error detection and correction, cutting investigation time from hours to seconds• Developed an internal library for streaming Kafka data to q/kdb+, improving data throughput by 1.5x• Built load-testing infrastructure to simulate 100k+ concurrent orders to benchmark trade booking system latency and failure modes under stress	
Software Engineer Intern <i>Meta</i>	Jun. 2022 – Sep. 2022 <i>Menlo Park, CA</i>
<ul style="list-style-type: none">• Instagram Demand & Efficiency Management, focused on improving Instagram's backend power efficiency• Led cross-team project to develop a system measuring engagement change per kilowatt used for proposed features• Built power monitoring dashboard covering 25 services and 500K+ servers, centralizing visibility for energy usage• Developed algorithm to triage power regressions to launches by correlating launch data with power time-series data	
Software Engineer Intern <i>Fwaygo</i>	Jun. 2021 – Sep. 2021 <i>Los Angeles, CA</i>
<ul style="list-style-type: none">• Developed microservices in Go for user/song data processing, report handling, and server-to-client messaging• Utilized RabbitMQ to facilitate interservice pub/sub communication between Docker container clusters on GKE• Created GraphQL APIs for user/song queries & mutations and integrated them into a React Native frontend	

RESEARCH

GNN Integration to Knowledge Graph for Nephrology QA System (Paper)	2022
<ul style="list-style-type: none">• Collaborated with two UCLA PhD students to train novel QA models enabling joint reasoning across language models and knowledge graph-enhanced GNNs for nephrology question answering• Tuned GreaseLM + QA-GNN models through hyperparameter optimization and knowledge graph configurations, achieving 37.2% accuracy on nephrology QA tasks (state-of-the-art at the time)• Applied mention detection, entity linking, and relation extraction using spaCy to construct a domain-specific knowledge graph and annotated QA dataset• Extracted and cleaned data from 563 textbook chapters and 814 papers to build high-quality nephrology corpus	

TECHNICAL SKILLS

Languages: Python, C++, SQL, PHP, JavaScript, Go, Java, Bash

Libraries: PyTorch, NumPy, Pandas, Matplotlib, React, Node, Express, GraphQL

Technologies: Git, Docker, Google Cloud, AWS, Firebase, MySQL, PostgreSQL