

SIDDARTH IJU

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EDUCATION & COURSEWORK

Columbia University

M.S. Computer Science – Artificial Intelligence

Expected Dec 2025

University of California Berkeley

B.S. Electrical Engineering & Computer Science and Business Administration – Major GPA: 3.9/4.0

Coursework: Deep Reinforcement Learning • Human-Robot Interaction • Efficient Algorithms and Intractable Problems • Data Structures • Machine Structures • Machine Learning • Artificial Intelligence • Computer Architecture • Compilers

Aug 2020 – May 2024

EXPERIENCE

Amazon, Cupertino, CA

Software Engineer

May 2023 – Aug 2023

- Led development of standardized command line interface across entire Amazon fleet of over 1 million devices, improving debugging, response, and development times by over 25%
- Collaboratively designed and independently implemented central client-server model for command line interface service operation using gRPC and protobuf

Quantel AI, Berkeley, CA

Machine Learning Engineer

Sep 2021 – Dec 2021

- Innovated custom features for financial prediction models based off yield curve analysis; presented directly to CEO
- Spearheaded integration efforts for custom features directly into consumer facing models and products
- Led development/testing of random forest and gradient boosting models for yield curve prediction

Correlia Biosystems, Denver, CO

Software Engineer

May 2021 – Sep 2021

- Developed end-to-end data tracking, pattern analysis, and image analysis software directly for customers
- Improved internal algorithms for computer vision based image analysis from 80% to over 90% accuracy
- Independently designed and created internal algorithmic performance software with immediate company adoption

PROJECTS

Safeguard

- Developed all-in-one security solution for LLM applications that intercepts, classifies, and sanitizes prompt injections
- Received \$10K in funding for “Best Generative AI Application” from AWS at the Berkeley AI Hackathon 2024

RLQuery

- Mentored research in InterACT lab under Berkeley A.I. Research (BAIR) on optimally query generation to augment inverse reinforcement learning algorithms, with a meta-learning perspective based off previous greedy approaches
- Developed 2 custom querying meta-environments in addition to custom data generation, plotting, and analysis tools

Jutsu

- Designed and implemented custom programming languages in Python inspired by Python, Java, and C++
- Developed end-to-end tokenizer, left recursive parser, and interpreter modules for custom language grammar

SKILLS

- Languages: Python, C, C++, Java, Golang, SQL, HTML, CSS, Javascript, Swift, OCaml
- Frameworks: Git, Django, gRPC, PyTorch, Tensorflow, Keras, Microsoft Office, Linux, Unix, MacOS, iOS
- General Technical Skills: Algorithms, Data Structures, OOP, Full-Stack Development, React, REST, Machine Learning, Deep Learning, Reinforcement Learning, Computer Vision, Software Development, Software Development Life Cycle, Probability, Statistics, System Design, Programming, Distributed Computing, Object-Oriented Design, App Development