Luke Andreesen

(913) 954-1123 ♦ landreesen@uchicago.edu ♦ <u>lukeandreesen.com</u> ♦ <u>LinkedIn</u> ♦ <u>GitHub</u>

EDUCATION

The University of Chicago, The College

Sept. 2021 - June 2025

Bachelor of Science in Computer Science, Specialization in Machine Learning

Bachelor of Arts in Economics, Specialization in Business Economics

The University of Chicago, Pritzker School of Molecular Engineering

Sept. 2025 - June 2026

Master of Engineering in Quantum Engineering

PROFESSIONAL EXPERIENCE

qBraid Chicago, Illinois

Quantum Software Engineering Intern

June 2025 - August 2025

- Developed qBraid Algos, a quantum algorithm library for constructing parameterized circuits in OpenQASM
- Implemented custom library inclusion support in PyQASM, an OpenQASM 3 semantic analyzer and toolkit
- Extended qBraid's quantum transpiler with support for AWS Braket's AutoQASM programming language

Chicago Quantum Exchange

Chicago, Illinois

Data Science Student Worker

September 2024 - April 2025

- Gathered and analyzed data on quantum education, workforce development, and industry landscape
- Coordinated events and strategies for networking and outreach with major companies in quantum industry
- Built software & data pipelines to monitor the real-time growth of the quantum industry in U.S. and Chicago

Error Corp.

College Park, Maryland

Quantum Software Engineering Intern

June 2024 - August 2024

- Developed gradient ascent-based quantum optimal control software for QuTiP via pulse amplitude optimization
- Conducted quantum state tomography on experimental results via IonQ devices for error correction experiments
- Explored practical use-cases of quantum machine learning using Qiskit, Pennylane, and QBraid platforms

Invictus Growth Partners

San Mateo, California (Remote)

Data Science Intern

August 2023 - May 2024

- Developed and deployed custom web crawler on AWS Linux server to autonomously scrape and process entire
 websites for use in proprietary deal-sourcing machine learning model using Python and AWS S3/SQS
- Automated the injection of 30+ data sources into Salesforce reports for deal-sourcing and portfolio monitoring
- Tuned parameters and optimized proprietary deal-sourcing Neural Engine used to identify over 80% of the firm's \$300+ million in private equity investments

Duco Experts

San Francisco, California (Remote)

Software Engineering Intern

May 2023 - August 2023

- Implemented 20+ large-scale features on the company's web application using Ruby on Rails framework, including integrated Slack messaging, collaborative action item tracking, and filter-based platform searching
- Developed and implemented AI software to match clients with experts for their projects using OpenAI API

Security & Intelligence Intern

January 2023-May 2023

- Delivered 15+ detailed research papers and briefs on topics including cybersecurity, national security threats, payment fraud, executive protection, and workplace violence to Fortune 100 clients
- Identified, recruited, and vetted over 150 high-profile individuals to be added to Duco's expert network

SKILLS

Quantum Computing: Qiskit, Braket, Cirq, PennyLane, QuTiP, qBraid SDK, Quantum Algorithms (QFT, QPE, VQA's) Data Science, AI, & ML: PyTorch, TensorFlow, LangGraph, NumPy/SciPy, Scikit-Learn, Pandas, R, SQL, Excel General: Python, Java, C/C++, HTML/CSS, Java/TypeScript, React (Native), Git, Selenium, LaTeX, AWS Services