B. Jack Crew

832-952-6237 | jack@jackcrew.net | linkedin.com/in/jack-crew/ | jackcrew.net

EDUCATION

University of Florida

Gainesville, FL

Bachelor of Science in Computer Science. 3.84 GPA. Dean's List all semesters

2021 - 2025

Relevant Coursework - Data Structures & Algorithms, Operating Systems, Machine Learning Engineering, Natural Language Processing, Information and Database Systems, Engineering Statistics

University of Edinburgh

Edinburgh, UK

Relevant Coursework - Computational Cognitive Science, Introductory Astrophysics

2022 - 2023

EXPERIENCE

Private Equity Summer Analyst

June 2024 – August 2024

Greenwich, CT

 $Lotus\ Infrastructure\ Partners$

• Leveraged S&P Capital IQ's API to automate analytics of hourly power price data from markets relevant to a portfolio of managed energy assets, increasing data granularity and reducing reporting latency by over 70% to support monthly power basis hedging strategy analysis

• Analyzed and valued (using DCF and market comparable methodologies) a portfolio of solar generation/storage projects; presented visualized analysis to investment committee; facilitated submission of \$1B offer

Business Development Intern

June 2022 – Aug. 2022

TaskUs, AI Services

Remote

• Increased number of monthly meetings scheduled in department by 10% through management of a top-of-funnel lead generation email campaign, focusing on AI and Data Science related conferences

• Audited and enriched contact data across 750+ Salesforce accounts, driving an 8% boost in lead generation efficiency through improved data quality and outreach precision

PROJECTS

Leornian | TypeScript, React, Node.js, Express, PostgreSQL, Prisma ORM

June 2025

- Developed a full-stack web app and chatbot for tracking health and habit data, using a React front-end served by a Node.js/Express REST API. Data is stored in a PostgreSQL database with Prisma
- Engineered a custom JSON query intent object, system prompt, and validation pipeline to safely convert user queries into SQL, resulting in a 100% elimination of SQL injection vulnerabilities vs. a direct text-to-SQL model
- Constructed a modular prompt engineering architecture separating response formatting from SQL generation, achieving 95% more accurate intent parsing and 40% faster response generation

$\textbf{Image Classification CNN} \mid \textit{Python, PyTorch, Scikit-learn}$

April 2025

- Built a custom convolutional neural network in PvTorch for classifying images into 12 discrete categories
- Developed a data augmentation pipeline with randomized transformations, expanding the dataset from 3,329 to over 13,000 images, resulting in a 15% increase in model generalization accuracy
- Analyzed per-class performance with precision, recall, F1-scores, and confusion matrix, achieving 77.34% overall accuracy and resulting in a 2x reduction in errors for underrepresented classes

ChessBase | Solidity, Typescript, Node.js, PostgreSQL, Drizzle

September 2025

- Developed a chess API with Node.js and TypeScript that connects to a smart contract on the Base blockchain's testnet to automate chess wagers in USDC for P2P matches
- Engineered multi-state escrow smart contract with automated settlement logic, achieving 100% successful fund transfers across 39 unit tests covering wins, draws, cancellations, and emergency withdrawals
- Implemented AES-256-GCM encryption for OAuth tokens with PKCE authentication flow, achieving 100% protection against token exposure while maintaining 95% faster decryption performance

TECHNICAL SKILLS

Languages: Python, C++, Java, JavaScript/TypeScript, SQL, HTML/CSS

Frameworks & Libraries: React, Node.js, Express, Tailwind CSS, Prisma ORM, PyTorch, Scikit-learn, JWT

Databases: PostgreSQL, MySQL/MariaDB, MongoDB

Developer Tools: Git, Docker, Vite, VS Code, Cursor, Linux, REST APIs, OAuth 2.0