

# Donald Cross

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## Innovative and client-focused technology professional

Seasoned fullstack software engineer with 6+ years of experience in UI development, API integration, and machine learning solutions. Skilled in system optimization for Docker deployment and AWS cloud integration. Proven track record of collaborating in cross-functional teams for notable organizations including McCann, Virtual Doorman, Navy Research Lab, Inversiones la Cruz and Capital One Bank. Entrepreneurial experience includes founding a startup focused on digital banking solutions.

## PROJECTS

### Community Lending Platform • 09/2024 – Present

UTEC

**Tech Stack:** Next.js, Tailwind CSS, NestJS, PostgreSQL, Railway.app, JWT Auth, React Query

Led development of a digital platform transforming traditional community lending circles ("Únicas") in rural Peru, serving 5,000+ members. The platform digitizes communal assemblies where members pool resources, manage micro-loans, and track repayments, fostering local entrepreneurship and community development.

Architected serverless microservices platform using Next.js, Supabase, optimized for low-bandwidth environments

- Implemented multi-tenant auth system with role-based access for coordinators, facilitators, and members
- Built financial transaction engine handling loans, payments, and share management with 99.9% accuracy
- Developed voice-based data entry features increasing accessibility for users with limited literacy

### RulesLab: Credit Risk Assessment Automation • 03/2024

Capital One

- Automates complex credit risk assessment processes, significantly reducing manual review time and improving consistency in credit decisions.

### IPOWER: Energy simulation management • 12/2021

Navy Research Lab

- Designed an intuitive web interface that allows users to interact with IPOWER through a standard web browser, improving accessibility and ease of use.

## **Banking App • 07/2019 – 11/2021**

Inversiones La Cruz

- Spearheaded development of a consumer-focused digital banking solution using React Native
- Led the development of a customer-centric digital banking chatbot, focusing on enhancing user experience and engagement
- Integrated AWS cloud-based technologies to improve functionality and interoperability of banking applications
- Collaborated with cross-functional teams to integrate AI solutions into streaming platforms, optimizing AI processes for performance and scalability, ultimately enhancing the user experience and market impact.

## **Facebook Messenger chatbot development • 01/2019**

LAB54

Enhancing user engagement and satisfaction through natural and user-friendly conversational interfaces

## **SIECF System • 04/2016**

INNÓVATE PERÚ

- I played a key role in developing and testing the predictive scoring model for unbanked youth using social media data. Leveraging both Python and RStudio, I was responsible for data collection, preprocessing, and analysis of user behavior on social networks, particularly Facebook. My hands-on experience involved implementing machine learning algorithms, feature engineering, and model evaluation.
- I worked on integrating the scoring model with the SIECF system, adapting to challenges such as changes in Facebook's API. My expertise in both R and Python allowed me to create efficient data pipelines, perform statistical analyses, and contribute to the development of a robust credit scoring system based on alternative data sources.

## **Redis : Key Characteristics and Use Cases Talk**

### **Payment Tracking Dashboard**

Sumbi

- Designed and implemented a responsive and user-friendly admin dashboard for a daycare payment tracking system using React and the Refine framework.

## **WORK EXPERIENCE**

### **Capital One • McLean, VA • 05/2024 – 08/2024**

Senior Engineer • Full-time

### **Mobomo (Contractor at Navy Research Lab) • Gaithersburg, MD • 12/2021 – 03/2023**

Senior Frontend Engineer

### **Inversiones la Cruz • Lima • 07/2019 – 11/2021**

Senior Fullstack Engineer

### **McCann • Manhattan, NY • 01/2019 – 07/2019**

Full-Stack Innovation Engineer

**Virtual Doorman • Manhattan, NY • 08/2018 – 01/2019**

**Lead Mobile Developer • Full-time**

**Fraud.net • Manhattan, NY • 01/2018 – 08/2018**

**Data Engineer • Full-time**

**Iguana Host • Lima • 05/2005 – 05/2011**

**Co-founder & CTO**

## EDUCATION

**Bachelor of Science in Food & Resource Economics**

University of Florida • Gainesville • 08/1994 – 05/1997

## CERTIFICATIONS

**The Data Scientist's Toolbox • 05/2015 – 12/2015**

Johns Hopkins University

## AWARDS & SCHOLARSHIPS

**Innovater Peru – Validation of Technology Award for Lending Chatbot App**

Validation of Technology Award for Lending Chatbot App

**Redis : Key Characteristics and Use Cases Talk**

## VOLUNTEERING & LEADERSHIP

**Sumbi • 11/2023 – 05/2024**

Senior Fullstack Engineer

- Led a cross-functional team for an NGO project, focusing on timelines, budget management, stakeholder communication
- Implemented secure payment system, payment tracking and user notification features, enhancing customer experience using NestJS and integrating with Amazon SQS for event-driven mechanisms
- Constructed an admin dashboard, secure payment system, payment tracking and user notification features, improving operational management and user engagement.

## PUBLICATIONS

**Redis : Key Characteristics and Use Cases Talk • 11/2019**

Youtube