

EJ O'Kelly

Austin, TX | hello+ej@whytilt.com | **Software Engineer & AI Specialist**

Professional Summary

I build full-stack systems that push technical boundaries, specializing in React.js and Next.js applications from real-time trading platforms to AI-powered testing frameworks. With over a decade of React experience, I create scalable frontend architectures and have recently integrated cutting-edge AI and machine learning capabilities into web applications.

My coding experience predates the AI boom, allowing me to code and debug effectively with or without AI assistance—my preferred model being Claude Code. I combine deep React/Next.js expertise with practical problem-solving learned from years of challenging projects across fintech, aerospace, and enterprise automation.

Technical Skills

Languages: TypeScript (10), Python (8), JavaScript (15)

Frontend: React.js (11), Next.js (7), CSS (15), Tailwind (5)

Backend: Node.js (14), Python (8), Ruby (12)

Testing: Jest (8), Pytest (6), RSpec (10), Cypress (5)

AI/ML: Machine Learning (8), Voice Models (7), Computer Vision (8)

Cloud/DevOps: AWS (8), Google Cloud (5), Linux (15)

Data: MongoDB (15), PostgreSQL (15), Vector DBs (3)

Work Experience

Software Developer - Web Testing Automation

Tilt | Austin, TX | Jan 2023 - Present

- Built **AI-powered** testing framework replacing complex headless testing systems
- Created vision-action model that navigates web interfaces like human QA workers
- Developed simple **English** instruction system replacing esoteric testing code
- Built training pipeline in **ReactJS** and **Python**

Reason for leaving: Completed my part of the work and seeking a new challenge

Sr Software Engineer

Voxbird | Latin America | Sep 2019 - Dec 2022

- Engineered advanced voice synthesis system solving cadence replication problems
- Built real-time voice processing handling complex speech patterns
- Created voice models capturing natural speaking rhythm of recording artists

Reason for leaving: Completed my work and the company is in maintenance mode

Sr Software Developer - Machine Learning Developer

Various Contracts | Latin America, Holland, India | May 2018 - Aug 2019

- Built deep networks for game-playing, classification, and voice synthesis
- Developed medical classifiers improving healthcare in rural communities
- Contracted **Next.js** and **React.js** work while pursuing **ML** research

Senior Developer

Finexbox | Dubai, UAE | Feb 2015 - Apr 2018

- Built **React/Next.js** trading interfaces processing millions in daily volume
- Wrote and audited **Solidity** smart contracts for crypto exchange platform
- Conducted penetration testing ensuring platform security

Reason for leaving: The company sold to private equity and I wanted to leave Dubai

Senior Software Engineer

Airware | San Francisco, CA | Oct 2011 - Jan 2015

- Built real-time web interfaces for autonomous drone control systems
- Developed fleet management tools processing live telemetry data
- Created responsive operator controls for aircraft management

Reason for leaving: The company went out of business

Software Engineer

Zairmail | Portland, OR | Jun 2008 - Sep 2011

- Led frontend development for digital-to-physical mail platform
- Built interactive drag-and-drop interfaces with early **AJAX** implementation

- Created seamless bridge between digital inputs and physical mail output

Reason for leaving: The company became a spam mailer, I wasn't interested in that

Web Developer

SMS.ac | San Diego, CA | Mar 2005 - May 2008

- Built high-volume **SMS** platform handling massive message throughput
- Scaled email servers from 50k/hr to 1M/hr using **Unix** optimizations
- Solved critical performance issues in telecom codebase

Reason for leaving: The company went for an IPO and didn't make it

Education

BS Computer Science

Cal State San Marcos | San Marcos, CA