



Ben Avellone

Full-Stack Software Engineer & Product Architect

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Summary

Full-stack engineer with over a decade of experience owning products end-to-end - from understanding user problems through architecture, implementation, and production operations. Deep expertise in TypeScript, React, Node.js, and PostgreSQL, with production Kubernetes infrastructure since 2017. Has spent the last six years designing and building a suite of over a dozen applications for an executive search firm - information-dense dashboards, candidate assessment platforms, and document packaging workflows used daily by recruiting professionals.

Comfortable working directly with stakeholders ranging from C-suite executives to individual contributors and translating operational needs into working software. Has made architecture and product decisions across a portfolio spanning recruiting technology, e-commerce fulfillment, streaming media, and industrial certification - each backed by cloud-native infrastructure (Kubernetes, Terraform, GCP) and built for daily production use. Currently incorporating AI-augmented development practices into production workflows using spec-driven development with Claude Code under strict architectural oversight.

Skillset

Code

- JS/TS
- React
- Express
- Next.js
- HTML/CSS
- PHP
- Redux Toolkit
- HTTP Streaming
- Playwright
- Jest/Vitest

Databases

- PostgreSQL
- EdgeDB
- Neo4J
- MongoDB
- MSSQL

Infrastructure

- Docker
- Kubernetes (since 2017)
- Linux / Bash
- GCP
- Terraform
- Prometheus / Grafana
- OAuth / SSO

Work History

CodeScalar, LLC

Founder / CEO

September 2019 - Present

(continuation of Coastware Technologies)

- Built and maintained over a dozen applications over 6 years for an executive search firm - operational dashboards, candidate assessment tools, and document packaging workflows relied on daily by recruiting professionals
- Designed and shipped products across e-commerce fulfillment, streaming media, and industrial certification, with shared infrastructure and common libraries consumed across dozens of applications
- Currently leading an AI-first rewrite of a legacy PHP codebase into a modern TypeScript/React SaaS product, using spec-driven development with Claude Code as the implementation engine under strict architectural oversight

Coastware Technologies, LLC

Co-founder / CEO

August 2016 - September 2019

- Built core business software for clients across multiple industries - from inspection platforms relied on daily by field technicians and management to membership tools for association leadership
- Made product and design decisions in close collaboration with stakeholders, translating operational needs into working software across concurrent projects

OrderCounter, Inc.

Full-stack Web Developer

August 2012 - August 2015

- Lead Developer of ScheduleGofer, an employee scheduling platform with a few hundred daily users, built from the ground up for the restaurant industry
- Translated business problems into product decisions in close collaboration with CEO and Project Manager

Education

University of West Florida / Pensacola, FL
Bachelor of Science in Computer Engineering

August 2016

- Capstone: Vision processing, 3D mapping and pathfinding using the Robot Operating System (ROS).
- Electives: Digital Image Processing, Intro to Mobile Robotics, Electromagnetic Fields I

Notable Projects

MediaTech Direct Fulfillment Portal

portal.mediatechdirect.com

April 2023 - Jan 2026

E-commerce fulfillment platform built for a personalized gifting company. Designed and built a unified portal serving customers, fulfillment staff, and management - customers upload videos and photos, the system transcodes and optimizes media via FFMPEG, and the fulfillment team preloads content onto purchased videobook products before shipping.

- Streaming media pipeline with progressive status updates - videos streamed to cloud storage, transcoded via FFMPEG, then streamed back for customer access
- Job-processing system using the database as broker, so a corrupted file fails one job instead of the whole pipeline
- Role-based bundle splitting across separate entry points for customers, operations, and management
- Integrations with BigCommerce, Stripe, Slack, and Twilio

Typescript/React	Next.js	Streaming	Transcoding	Stripe
NodeJS	EdgeDB	PostgreSQL	OAuth	Kubernetes

Ropella Intranet

*.ropella360.com

May 2020 - Present

Suite of over a dozen applications built over 6 years for an executive search firm specializing in the chemical industry. Designed shared patterns and infrastructure across the platform - from information-dense realtime dashboards used daily for operational decisions to public-facing candidate assessment tools and automated document workflows. Mix of legacy PHP applications with greenfield TypeScript/Node projects.

- Dashboards - information-dense interactive dashboards used daily by employees for pipeline tracking and operational decisions
- Skill Surveys - public-facing candidate assessment platform, displays questions one-by-one, like TurboTax
- Candidate Packaging - dynamic PDF content composition with custom cover pages, headers/footers, and merged documents
- Shared base Docker images, Terraform-managed infrastructure, and common libraries for CRM access and data types across PHP and TS codebases
- Azure OAuth2/SSO integration using an nginx proxy for all internal applications

Typescript/React	Next.js	Live Dashboards	NodeJS	PostgreSQL
MSSQL	PHP		OAuth	Kubernetes

BSI Certification Portal

portal.breathingsystemsinc.com

April 2015 - Present

Core business software for a life-support equipment company in the highly regulated Oil & Gas industry, relied on daily by technicians, management, and clients. Designed a no-code form builder that lets management create new inspection types without developer involvement, paired with a PDF rendering pipeline that assembles customer-ready certification reports on demand.

- Continuously in production since April 2015
- Form Builder - no-code system allowing management to create new inspection forms without developer involvement
- PDF Reports - dynamic rendering pipeline assembling templates, uploaded technician signatures, and inspection data into customer-ready reports
- Scale - ~7k pieces of equipment and 18k+ inspections tracked as of May 2026
- Notifications - automated alerts when equipment approaches certification expiry

Form Builder	No-code	AngularJS	NodeJS	MongoDB
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