

# Jacob Funke

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HTTP://JAKEFUNKE.ONLINE/

## EXPERIENCE

WELL Health

**Senior Backend Engineer**

April 2022 – Present

**Backend Engineer**

January 2019 – April 2022

Development for B2B healthcare communications platform enabling bidirectional texting, phone, and email messaging between healthcare providers and patients

- Communications team technical lead, with focus on staff/patient portals and message delivery pipeline
  - Led tech talks within the organization to share product knowledge and system architecture
  - Spearheaded interview process overhaul, developing new process to create and vet interview problems
  - Process improvements - asynchronous backlog refinement reduced meetings from 90 to 10 minutes
- Backend development using TypeScript, NestJS, hosted on AWS ECS, MongoDB, and PostgreSQL
- Major projects include technical planning and development of:
  - Live Chat - widget for patients to anonymously communicate with hospital staff
    - Designed and developed independently from inherited MVP prototype, implemented rate-limiting and tightened security on public-facing APIs
  - Smart Phrase Engine - new microservice for dynamic text replacement in outbound messaging
    - Led design and implementation with team of 4 backend developers, refactored into NestJS
  - Extended Language Support - extend application language support from 18 to 109 written languages
    - Rolled out to 10+ regional hospitals with high populations of non-English speaking patients
    - Implementation of feature sanitized and normalized patient language preferences through entire application, enabling future extension of translation-supported features

Red Ampersand Inc.

**Full Stack Engineer**

November 2017 – January 2019

Feature development for the screenwriting talent discovery and competition hosting SaaS application Coverfly

- Frontend development using HTML, CSS, Laravel Blade, PHP, Bootstrap, JavaScript, and jQuery
- Backend development using PHP, Laravel, and MySQL, hosted on AWS EC2 and RDS
- Independently conceived, pitched, planned, and implemented product upgrades including:
  - Writer Profile - Personalized page for screenwriters to showcase achievements and share scripts
  - Industry Dashboard - Invite-only film industry facing site to discover top-rated scripts on Coverfly

Telescope Inc.

**Technical Operations Engineer**

July 2016 – November 2017

API engineer and technical lead for television-specific social media fan-vote applications with millions of users

- Designed and built APIs to handle high volumes of user votes submitted via API calls and social media
  - Projects included ABC's Dancing with the Stars, NBC's America's Got Talent, iHeartRadio Music Awards
- Comprehensive testing and debugging of API performance, behavior, and reliability
- Scaled, monitored, and triaged live-on-television vote events on distributed AWS EC2 environment

SAS Institute

**Systems Support Engineer**

February 2015 – June 2016

- Designed, built, and maintained team website/CMS to organize departmental resources
- Collaborated with dev team on development of hotfixes and patches to triage issues raised by customers
- Directly assisted customers and application engineers with SAS installation and deployment issues

Renesas Electronics America

**Embedded Software Engineer**

September 2013 – March 2014

- Ported firmware code between CubeSuite+ and IAR Compilers for the RL78/L13 Capacitive Touch board
- Created application code examples and supporting documentation (C/C++)
- Developed product demonstrations exhibiting low power capabilities of Renesas microcontrollers

## EDUCATION

North Carolina State University, May 2013

**BS in Computer Engineering, BS in Electrical Engineering, Magna Cum Laude**

## SKILLS

TypeScript, JavaScript, Python, PHP, Node.js, NestJS, Laravel, jQuery, HTML, CSS, PostgreSQL, MongoDB, Elasticsearch, Redis, Docker, Ansible, Jenkins, Git, GNU/Linux