

Tim Dunn

Senior Software Engineer | Ruby on Rails Specialist | Healthcare Data Integration

US Citizen | Available Worldwide Remote | tim@dunnwebstudio.com | dunnwebstudio.com

PROFESSIONAL SUMMARY

Full-stack software engineer with **8+ years of experience** building scalable web applications and public health informatics systems. Deep expertise in **Ruby on Rails performance optimization** and **healthcare data integration** (HL7/FHIR, ELR, disease surveillance). Proven track record of delivering 2x performance improvements, maintaining production systems serving thousands of users, and translating complex healthcare requirements into reliable technical solutions. US-based experience with availability for worldwide remote collaboration.

Core Specializations: Rails Emergency Bug Fixes | Legacy Code Optimization | Healthcare API Integration (HL7/FHIR) | Performance Tuning | TDD/RSpec

TECHNICAL SKILLS

Languages	Ruby, Python, Java, PHP, JavaScript, SQL, HTML/CSS
Frameworks	Ruby on Rails, Django, Flask, React, Angular, Next.js, Tailwind CSS
Databases	PostgreSQL, MySQL, Neo4j, Elasticsearch
DevOps/Cloud	AWS, Docker, Heroku, Linux Server Administration, Vercel, Cloudflare
Health IT	EpiTrax, EMSA, OpenEMPI, HL7/FHIR, Electronic Lab Reporting (ELR), Disease Surveillance
Testing/Tools	TDD, RSpec, Capybara, Git, GraphQL, REST APIs, Microservices

PROFESSIONAL EXPERIENCE

Public Health Informatics Scientist | Southern Nevada Health District Las Vegas, NV | 2023 - Present

- Develop and maintain EpiTrax disease surveillance system using Java, WildFly, and PostgreSQL serving Nevada's public health infrastructure
- Implement bug fixes and features for EMSA (Electronic Message Staging Area), automating processing of electronic laboratory reporting messages
- Led integration of OpenEMPI Master Patient Index, improving patient matching accuracy and data quality across surveillance systems
- Manage Docker containerization and Linux server administration for production/staging environments
- Translate epidemiologist and public health official requirements into robust technical solutions

AI Training Specialist | Outlier.ai Remote | 2022 - 2023

- Trained AI models using Java and Python, contributing to machine learning model improvement
- Evaluated and labeled code training data to enhance model accuracy for developer-focused AI tools

Contract Ruby on Rails Engineer | Various Clients Remote | 2017 - 2022

Pwnie Express

- Optimized network discovery application performance by 2x** through Ruby on Rails and SQL query optimization

The Farmland Project

- Built Rails application connecting farmers with food banks using GraphQL, Elasticsearch, and PostgreSQL
- Practiced strict TDD with RSpec; collaborated with product team on feature planning

Performant Software Solutions

- Maintained Archnet, a Rails application hosting scanned historical archives
- Contributed to annotation studio using React, Ember, and Backbone.js microservices

Southern Nevada Health District (Contract)

- Optimized Health Statistics application using Rails, Python/Flask, Neo4j, and AWS

Software Engineer | Nathan Research

Remote | Apr 2016 - Jun 2017

- Built multilevel marketing platform with Rails and Neo4j graph database
- Developed CSV uploader processing 8 tables per row with AWS S3 integration
- Created API generator tool producing Tests, Controllers, and Models from configuration templates

Software Engineer | Genetic Direction

Remote | Nov 2015 - Apr 2016

- Built APIs for genetic reporting engine using Ruby on Rails
- Practiced TDD with Capybara, RSpec, and comprehensive integration testing

EDUCATION

Web Development Track - Bloc

2015

Bachelor of Arts, Sociology - Arizona State University

2011

KEY ACHIEVEMENTS

- **2x Performance Improvement:** Optimized critical Rails applications through query optimization and caching strategies
- **Healthcare Integration Expert:** One of few developers with combined Rails expertise AND HL7/FHIR healthcare data integration experience
- **50+ Projects Delivered:** Consistent track record of on-time delivery across diverse client engagements
- **Production Systems:** Maintained mission-critical disease surveillance systems serving thousands of healthcare users