

Nathan Trautenberg

Back-End Software Developer

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Summary

Versatile software engineer with a proactive, collaborative approach honed through 6 years of teaching physics at the high school level. Experienced in web application development using Rails and RESTful APIs. Committed to Test Driven Development, efficiency, and clean code practices leading to more reliable, maintainable, and efficient codebases.

Technical Skills

Languages/ frameworks: Ruby, Rails, ActiveRecord, SQL, HTML, CSS

Testing: Test Driven Development, RSpec, WebMock, VCR

Version Control: Git, GitHub, Render, Restful APIs, Agile

Databases / deployment: PostgreSQL, Render, Heroku, Digital Ocean

Projects

Third Space | [GitHub Rails BE](#) | [GitHub Rails FE](#) | [DemoComp Video](#) | 5 person team | 150 hours

Tech Stack: JavaScript | Bootstrap | SimpleCov | Faraday | OmniAuth | 2FA | Bcrypt | Bullet | Geocoder | VCR | Digital Ocean

- Application finds “third spaces” by mood or other criteria such as lighting, accessibility, etc. that allows neurotypical and neurodivergent people to feel more comfortable going out.
 - Implemented all login features, including Oauth, MFA, bcrypt, and password reset, as well as set up mailers using SendGrid
 - Set up security features, including encryption, to keep sessions, tokens, and other user information safe from potential bad actors
 - Created and migrated all frontend tables, as well assisted with backend migrations
 - Followed MVC to allow for clean, compartmentalized code that is easy to test
 - Built frontend and backend APIs to retrieve information from both Yelp and our backend database

Mon Recette | [GitHub Rails BE](#) | [GitHub React FE](#) | [Deployed App](#) | 5 person team | 80 hours

Tech Stack: Typescript | React | Vercel | JSON | SimpleCov | Faraday | VCR | Nokogiri | Bcrypt | CircleCI | Cypress | Heroku

- Allows users to store, save, and edit recipes from multiple websites.
 - Parsed data and digested documentation from multiple APIs including Food Network, All Recipes, A Wicked Whisk, and Taste of Home, while handling all API keys securely
 - Used nokogiri gem and html inspection to webscrape ingredients and directions from recipes amongst the aforementioned websites
 - Created secure login and logout features
 - Implemented CircleCI; wrote Cypress testing for frontend and achieved 100% coverage on spec tests on backend

Runway Reviews | [GitHub Python BE](#) | [GitHub Vue FE](#) | [Deployed App](#) | 5 person team | 40 hours

Tech Stack: Npm | CircleCI | Cypress | Pdb | Python | Django | HTML | JSON | CSS | JavaScript | Vue | PostgreSQL

- Allows users to review airports. This project was about familiarizing ourselves with Python and the Django framework.
 - Used Beautiful Soup library and html inspection to webscrape airport data from stratos jet
 - Wrote pip and cypress tests for backend and frontend respectively to achieve over 90% coverage
 - Fixed user review features so users could write reviews on airports they visit and label their comments with tags such as restaurants, bathrooms, general, etc.

Little-Shop-7 | [GitHub Rails](#) | 4 person team | 70 hours

Tech Stack: RSpec | Orderly | Capybara | Shoulda-Matchers | SimpleCov | Faker | FactoryBot | CSS | PostgreSQL | ActiveRecord

- Application simulates an etsy shop with customers, merchants, items, invoices, and discounts.
 - Performed ActiveRecord and SQL database queries
 - Tested happy and sad paths to achieve 100% coverage
 - Used css styling to make website look more pleasant

Sweater Whether | [GitHub Rails](#) | solo | 12 hours

Tech Stack: RSpec | Orderly | Capybara | Shoulda-Matchers | SimpleCov | Faraday | VCR | RestfulAPI | JSON | PostgreSQL

- Provides a weather forecast at a final destination, trip time with an eta, and recommends a place to stop and eat.
 - Parsed data and digested documentation from 3 APIs including Yelp, WeatherAPI, and MapQuest, while handling all API keys securely
 - Adhered to RESTful convention, single responsibility principle, pillars of OOP and TDD
 - Tested happy and sad paths to achieve 100% coverage

Professional Experience

Sales and Logistics Analyst, Goldbug, Denver, CO 01|2015 - 08|2015

- Managed portfolio for Walmart's travel accessories brand wall, saving **\$1mil** USD in sales.
- Collaborated with production planning, warehouse, and 3PLs to make sure time-sensitive goods arrived on schedule.
- Assisted forecasting and data analysis for travel accessories and other fashion lines for Walmart goods.

Physics Teacher, Rangeview High School, Aurora, CO 08|2017 - 08|2023

- Team Lead responsible for writing and modifying the physics curriculum to align with CSS and NGSS standards for **100%** district-wide adoption and improve student engagement by over **15%**.
- Certified "Highly Effective" teacher adept at using mathematics to solve real-world problems.
- Emphasized project based learning and maintained rigorous standards that led to over **90%** average student growth.
- Assistant Coach for the boys and girls tennis teams that lead to **4x** EMAC champions, as well as Head Coach for Esports.

Life Sciences Teacher, Aurora Hills Middle School, Aurora, CO 08|2016 - 08|2017

- Designed a project-based learning curriculum that met state standards and increased student engagement by **30%**.
- Actively contributed to making a positive and safe learning environment where all voices were welcomed via restorative justice and no-nonsense nurturing practices that reduced classroom disruptions by **40%**.

Research Assistant, Field Museum, Chicago, IL 07|2012 - 08|2014

- Conducted phylogenetic analysis of avian chewing lice genus *Ricinus* and *Austrophilopterus*.
- Facilitated DNA extraction protocols, PCR amplification, sequence editing and analysis.

Education

Turing School of Software and Design, Denver, CO 2023 - 2024

Accredited Certificate in Computer Science and Back-End Engineering | **GPA: 4.0**

- 1800 hours training in software engineering with a focus in backend development
- Emphasis on test-driven development and implementing design theories through collaboration

Adams State University, Alamosa, CO 2016 - 2017

Master of Arts, Education | **GPA: 4.0**

- Concentration in Secondary Sciences
- Endorsement in ELD/ Culturally/ Linguistically Diverse Education

Northwestern University, Evanston, IL 2010 - 2014

Bachelor of Arts, Philosophy, Minor Portuguese | **GPA: 3.41**

- Northwestern University Dean List, 2012-2013
- Brady Scholar, Highly Selective Brady Scholar Program in Civics and Ethics, culminating in senior capstone
- Member of Men's club lacrosse and tennis teams
- Weinberg Scholarship recipient for work-abroad research in amazonian antbird phylogenetics

Interests and Avocations

Fly fishing, skiing (level II avalanche certified), surfing, writing