Jonathan Young

Full Stack Developer rooted in resilience and problem solving skills.

✉ jyoung0696@gmail.com

🌐 iterating.github.io

🐙 github.com/iterating

🏢 US citizen

ABOUT ME

Full Stack Developer with over 3 years of work experience building web applications and solving business problems with a wide array of technologies including TypeScript, Node.js, GraphQL, React, and SQL. Previously in medicine, I found myself proficient in combining domain knowledge with programming skills to build tools for myself and others, and switched careers to software development. I'm a quick learner who's not afraid to learn something new and apply it to any given task.

EXPERIENCE

Full Stack Developer (contract)
2024 - Present

LA Film Lab and Studio, Los Angeles CA

Developed full-stack solutions with component-driven architecture using TypeScript, Vue.js, and Node.js with Supabase as the backend-as-a-service, delivering mission-critical features that drove operational efficiency and customer engagement beyond growth expectations for a team of our size.

- Implemented a real-time pub/sub event architecture with SSE and WebSockets, enabling instant order updates across all platforms
- Built RESTful API endpoints that retrieves and updates order information between Square's e-commerce SDK and Supabase database, resulting in seamless order management
- Developed optimized kiosks with Vue.js and TypeScript for order entry that reduced process time by 25% and reduced manual errors
- Created database migration tools and stored procedures with Javascript and SQL, leading to successful database migrations

Web Developer (contract)
2022 - 2024

Greater Boston Snow Removal, Boston MA (Hybrid Remote)

Developed scalable web applications that transformed the company into Boston's market leader, growing from 4 to 80+ employees through coordinated dispatch and real-time communications

- Implemented microservices architecture using TypeScript and Node.js, achieving 99.9% uptime during peak snow events with 1,000+ daily transactions
- Built location-based worker matching system using Google Cloud API and MongoDB geospatial indexing, improving service time by 40%
- Engineered SMS management functionality with Twilio SDK, allowing for coordinated dispatch and updates
- Implemented robust security infrastructure with JWT-based authentication and role-based access control for secure data access across microservices
- Deployed system on AWS with ElasticBeanstalk running EC2 instances, maintaining high availability and scalability

Business Intelligence Analyst / Operations Manager
2019 - 2022

- Managed multiple operations teams and implemented route optimizations that reduced operational costs by 25%
- Leveraged Excel, SQL, and Tableau to create dashboards for KPI tracking and business intelligence, driving strategic decision-making
- Applied operational optimization experience to enhance software decisions in subsequent role as Web Developer, creating scalable solutions based on real-world business processes

Clinical User Specialist Intern
2014 - 2015

Vecna Healthcare, Burlington MA

Provided usability improvements to EMR frontend with feedback from training and working with clinical staff, reducing clinical documentation time by 30%

- Collaborated closely with engineering teams to prototype user interfaces with HTML, CSS, and JavaScript in a Linux environment that meets the needs of healthcare providers while ensuring HIPAA, HITECH, and HITRUST compliance

Research Assistant in Vaccine Immunology
2011 - 2013

Vaccine Immunotherapy Center, Massachusetts General Hospital, Boston MA

EDUCATION

University Of Massachusetts Chan Medical School

M.D. Candidate

2014 - 2018

Developed clinical decision support tools and won American College of Physicians National Abstract Competition

Publications:

- Pretending to Be the Great Pretender. *ACP Impact*, October 2016.
- A Chemokine Protective Shield for Islet Transplantation. *Digestive Disease Interventions*, Boston, MA.

Tufts University

B.Sc. Magna Cum Laude with Thesis Honors

2007 - 2010

- Managed IT infrastructure as Computer Lab Administrator at Eliot-Pearson Children's School, later earning Red Hat Certified System Administrator (RHCSA) certification

Choate Rosemary Hall

American Invitational Mathematics Examination (AIME) Qualifier

- Recognized for exceptional analytical skills and mathematical modeling, achieving top 5% performance in algorithmic challenges

Performed cutting-edge transplant immunology research, resulting in published findings in the prestigious American Journal of Transplantation

- Programmed 'Cellbot', an automated cell counting program in Java and ImageJ, improving efficiency and accuracy of data collection

Publication:
Alginate encapsulant incorporating CXCL12 supports long term allo and xenoislet transplantation without systemic immune suppression. *American Journal of Transplantation*, 2015. DOI 10.1111/ajt.13049

PROJECTS BUILT

Query Builder

Platform that enables data analysts and developers to execute custom queries and build analytics tools

- Developed RESTful APIs for PostgreSQL, MySQL, and MongoDB databases, allowing efficient data retrieval and processing
- Built reusable and customizable templates for time analysis, table statistics, and data quality queries

Clinical Decision Support Tools

A collection of medical calculators and decision support tools:

- Implemented evidence-based algorithms for clinical decision making in Python and Node.js
- Integrated HR7 and FHIR data export, enabling interoperability with medical record systems

Placenotes

Location-based social platform enabling contextual note-taking and message delivery based on users' physical locations

- Engineered a high-performance data architecture with geospatial indexing and real-time updates using MongoDB, REST, and GraphQL
- Built end-to-end JWT authentication across React frontend, Express.js middleware, and API endpoints, allowing secure user access
- Implemented state management with Redux, ensuring smooth user experience and data consistency

SKILLS

Typescript/Javascript, Node.js

Python, NumPy, Pandas

GraphQL, RESTful web services

SQL skill certification, PostgresSQL, MongoDB, Firebase/Supabase

React, Nuxt, Vue

AWS, EC2, DynamoDB, , RDS, ElasticBeanstalk

Git, Linux environments, Docker, Bash

Red Hat (Linux) Certified System Administrator (RHCSA)

Agile and Lean methodologies, User Stories