

## Skills

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Ruby. Ruby on Rails. Linux. C. C++. JavaScript. TypeScript. Java. C#. HTML. CSS. TDD. Docker. React. Heroku. Nginx. VMWare. MySQL. PostgreSQL. Windows.

## Experience

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### **Senior Instructor & Chief Technology Officer** / Suncoast Developers Guild

August 2018 - Present / Saint Petersburg, Florida

- Expanded market from full-time in-person classes into remote, part-time courses by developing an open-source curriculum for Ruby, C#, Entity Framework, ASP.NET, HTML, CSS, Responsive Web, JavaScript, TypeScript, React, Deployment, and Algorithmic Thinking. See <https://handbook.suncoast.io>.
- Enabled part-time courses by producing over 400 hours of recorded lectures with detailed slides and corresponding reading and code samples.
- Reduced overhead of managing required student records by building a student management system in Rails/React/TypeScript to track enrollment, homework assignments, grading, and student progress reports.
- Contributed to a 95% placement rate by identifying, recommending, and guiding students to secure positions as junior developers.
- Contributed to internal app generator: app-app. Based on react-scripts, builds student starter projects.

### **Senior Developer** / STRATACACHE (Real Digital Media)

August 2017 - Present / Saint Petersburg, Florida

- Improved the marketability of the NEOCAST digital signage management system by re-implementing, as the primary developer, the software as a JSON-API back-end in Ruby on Rails and a front-end in over 30,000 lines of TypeScript and React using Bootstrap.
- Enabled new markets by creating and maintaining a custom Ubuntu-based OS that supported 32-bit Intel, 64-bit Intel, and then ARM-64 based embedded systems.
- Maintained software development costs by building, deploying, and supporting a Ruby on Rails project for over 15 years. From Rails version 0.9 through Rails version 6.1
- Lowered hardware platform costs by maintaining a single application architecture that ran on 32-bit Intel, 64-bit Intel, ARM-64, and Android devices.

- Reduced hosting budget by building automation software for deploying and scaling AWS resources to host a Docker-based application.
- Increased diagnostic capability and lowered time-to-resolution of issues by implementing consolidated application log collection and analysis.
- Achieved first-to-market amongst other divisions in a transition to the ARM platform by developing and implementing custom kernel patches for ARM-64 systems.
- NOTE: *STRATACACHE purchased real Digital Media.*

## **Instructor and Product Development** / The Iron Yard

July 2015 - July 2017 / Saint Petersburg, Florida

- Increased enrollment at one of the most profitable campuses at the largest in-person code school through developing and implementing a curriculum for Ruby, Ruby on Rails, HTML, CSS, JavaScript, React, Node, Express, Algorithmic Thinking, and Deployment.
- Improved our ease of delivery for curriculum and student information by building custom learning management software.

## **VP Product Development & Engineering** / Real Digital Media

January 2005 - July 2015 / Saint Petersburg, Florida

- Designed, architected, and implemented a software-as-a-service digital signage platform recognized as the most adaptable and easy to use in the market.
- Managed a team developing Ruby on Rails applications to provide a remote management web application to operate our customer's digital signage networks.
- Maintained excellent application availability by building infrastructure that processes over *five million requests* and *one million background jobs* per day.
- Increased application uptime and fault tolerance by building and deploying an AWS infrastructure and software deployment strategy, including multi-zone redundancy.
- Continually lowered operational costs by migrating infrastructure from one server in a closet through a data center transition to a scalable Amazon Web Services based architecture over the course of the application's lifetime.
- Improved customer support by creating monitoring dashboards and alerts to forecast and resolve issues before customers are impacted.
- Ensured continuity of business function by building disaster recovery policies and code, including offsite content and database backups.
- Opened new markets by adding hardware platforms by developing Linux and Android software and custom Linux distributions to run on embedded and PC platforms.
- Increased platform reliability and device uptime by creating a custom Ubuntu-based operating system designed to boot from a single squashfs root filesystem combined with an overlay filesystem allowing for secure and reliable remote upgrades of thousands of remote devices.
- Increased the number of hardware platforms supported by patching Linux hardware drivers for device incompatibilities and missing features.
- Reduced the complexity of supporting a diverse array of platforms spanning over 30 hardware configurations, from custom system-on-chip to off-the-shelf hardware, including migrations from 32

to 64 bit operating systems and software.

- Built online report generator producing CSV, XML, JSON, and PDF reports.
- Expanded markets to new customers by designing and building an interactive editor for creating digital signage presentations containing multi-zone and multi-screen configurations.
- Reduced the count and size of servers through code, query, and index optimization.
- Reduced implementation and support complexity by designing a single flexible architecture in C, C++, and Java to download, manage, and play customer media that grew to support Linux, Windows, and Android-based devices.

### **Senior Engineer** / Honeywell Space Systems

March 2002 - January 2005 / Clearwater, Florida

- Innovated the use of commercial-off-the-shelf hardware and software (COTS) as a senior software architect on the Ballistic Missile Range Safety Technology program.
- Achieved Flight Category 2 certification (one level below the safety category for human space flight) for tracking launch vehicles, downloading telemetry, converting real-time telemetry data into actionable information, and plotting the Instantaneous Impact Point of launch vehicles.
- See: <https://en.wikipedia.org/wiki/BMRST>

### **Senior Software Engineer** / Teltronics

Feb 2000 - March 2002 / Sarasota, Florida

- Senior software engineer building C++ and Windows-based software for managing networks of PBX phone systems.
- Contributed to embedded systems software in C and C++
- Created and executed unit, system, and acceptance tests.

### **Owner & Chief Technology Officer** / Epsilon Squared Software

January 1999 - Feb 2000 / St Petersburg, Florida

- Built, marketed, and sold products (InstallWatch and InstallRite) for documenting and automating the remote deployment of software on Microsoft Windows networks.

### **Senior Consultant** / CFT Consulting

July 1995 - January 1999 / Sarasota, Florida

- Designed and built software systems for nationwide system deployments and migrations of POS terminals, inventory management systems, warehouse management systems, and accounting systems for GAP, Egghead, Totes, and Adidas.
- Managed the RFP process for large POS and Merchandising system selections.

## **Community**

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**BarCamp Tampa Bay** 2007 to 2017 - Founding member of BarCamp Tampa Bay

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**Ignite Tampa Bay** - 2011 to 2017 - Founding member of Ignite Tampa Bay

**Coder Night** - 2017 to 2021 - Organized a meetup designed to help developers of all skill levels practice and receive feedback in a supportive and collaborative environment.

**Tampa Ruby Brigade** - 2006 to Present - Organized the Tampa Ruby Brigade meetup.

## **Education**

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### **University of Arizona**

Masters in Management Information Systems

### **University of Rochester**

Bachelor of Arts in Computer Science / Applied Mathematics