

## Summary

My ten years of systems integration experience and full-stack programming in multiple languages have honed my ability to create scalable and flexible systems. I seek opportunities to apply my aptitude and insatiable appetite for learning new technologies to the world where code meets art.

## Key Skills

C# • TypeScript • Python • Java • SQL • Git • DevOps • Docker/Kubernetes • Web API Design • Microservices  
ASP.NET Core • Vue • Windows • macOS • Linux • Bash/Zsh • PowerShell

## Experience

2022 – present

**Cantera**  
**C#/Python Specialist**

**Somerville, MA**

- Introduce a new interface to consume a complicated scientific computing toolset from .NET by leveraging high-performance, low-level interop techniques
- Develop a Python-based source generator to automate scaffolding C# code from the underlying C API

2022

**Rockstar Games**  
**Software Engineer**

**Andover, MA**

- Developed and maintained the online services platform with over 100 million distinct users and 1 million concurrently online players
- Provided operational support for title releases/updates, minimizing down-time during high usage periods
- Fostered a culture of quality by writing unit tests for each new piece of code, performing stringent code reviews daily (including as approver), and submitting code changes only through our CI/CD pipeline
- Adhered to a stringent set of coding standards while championing modernization
- Innovated new services in coordination with the game engine team to provide more features for players

2017 – 2022

**WGBH Educational Foundation**  
**Senior Software Developer/Integrations Architect**

**Boston, MA**

- Developed C# and Python-based integration system of web APIs and microservices for billing, new hires, storage, mass data transform/copy, and systems monitoring, all hosted in a Kubernetes cluster
- Introduced loosely coupled design to the foundation: one API for integrating several related applications
- Wrote add-ons for Jira and Confluence in Java and Groovy using a shared, reusable component design
- Implemented a complete CI/CD solution using the Atlassian Suite with automated build and deploy
- Authored comprehensive naming conventions and style guidelines for the systems department

2010 – 2014

**Emcore Corporation**  
**Senior Applications Developer/Consultant**

**Albuquerque, NM**

- Developed and maintained .NET-based custom shop floor control system for the solar cell fab
- Slashed resource usage and loading time of the shop floor front-end by 80% and 40%
- Assisted with SQL-based data extraction and migration for upgrading legacy systems
- Generated data packages to support external customer requests and resolve process excursions
- Released and documented software in compliance with industry-standard certification requirements

2008 – 2010

**Emcore Solar Power, Inc.**  
**Production Engineering Lead**

**Albuquerque, NM**

- Developed, sustained, and optimized processes to improve yield and throughput while trimming costs
- Doubled diode assembly production capacity
- Reduced CIC and diode assembly shipping costs by 30% with automated reporting and labeling

## Education

**2015 – 2016**

**New England Conservatory**

**Boston, MA**

- Composition Studies with Kati Agócs, Conducting/Rehearsal Studies with Michael Gandolfi
- Theory Department Tutor for Tonal Practice Harmony

**2012 – 2015**

**Longy School of Music**

**Cambridge, MA**

- Composition Studies with Paul Brust, Piano Studies with Libor Dudas
- Composition and Theory Department Tutor for Harmony and Keyboard Skills

**2002 – 2007**

**New Mexico Institute of Mining and Technology**

**Socorro, NM**

- B.S. Materials Engineering, Minor in History
- Initiated into Tau Beta Pi, the engineering honors society
- Active member of student association, student materials science society, and intramural sports teams

## Other

Member of Second Line Brass Band, NMT Alumni Association and Tau Beta Pi, FLAG Flag Football

Adoring cat dad and enthusiastic supporter of neighborhood and community

Interests include rock climbing, cycling, orchestral music, chicken husbandry, saxophone, trumpet, synthesizers