### Goal

A highly experienced software developer, writer, and manager of engineering teams committed to software quality and craftsmanship, seeking interesting problems to solve. Well versed in mentoring junior developers and eager to pass on his knowledge.

## **Career Highlights**

Founded multiple startups. Executive experience running software development groups from 2-14 members, sales, marketing, and administration staff up to 20 persons, with over 4M annual budgets. Responsible for tech support department, sales/marketing campaigns, administration/finance, and software development/engineering staff.

Web site customers include sports teams and conference sites (Fox Sports), healthcare (Synzi), insurance (Nationwide/Allied), military (US Army) and real estate agencies (Keller Williams, etc.), law offices, automotive repair, financial sites (StreetShares, Wendy's International, Huntington National Bank, etc.), state government (Ohio Board of Regents) and numerous small business sites. Most sites were database driven with custom CMS features, ecommerce integration, etc. Developed more than 200 sites overall. Worked on a highly scalable dating site with over 150,000 subscribers, Intuit TurboTax Personal Pro, a life settlement insurance application, ACH clearinghouse, an Internet of Things data collection app, a social networking app, workflow engine, numerous projects for Cox Media Group and Synzi virtual health care application.

Experienced with Django (python), GraphQL, REST Framework, Wagtail CMS, Falcon (python), Postgres, Docker, and Cake/Symfony (PHP) MVC frameworks, various template languages and numerous Javascript libraries including Vue.JS, jQuery, webpack, etc..

Well versed in TCPIP and Internet protocols. Very capable with devops including continuous integration and deployment, python, terraform and ansible. Performed forensic work for local FBI office in Columbus. Acknowledged Linux security expert, having performed more than 150 security audits since 2000, including work for local police departments, FBI, and other law enforcement agencies. Built and maintain numerous firewalls based on Linux.

Developed more than 25 commercial software products on Unix and/or Windows since 1990. Several were market category leaders, including Shark!mail (top 8 worldwide sales in 1994, according to InfoWorld), and CD-Direct, a Sambalike SMB Emulator for Banyan VINES.

Senior Lecturer in Web Development (Ruby/Rails) at The Ohio State University for the past 5 years. Adjunct Professor of Computer Science/Web Development at Franklin University teaching operating systems, web development, and enterprise patterns and architecture using python, PHP, and java for 6 years. Developed a masters-level web development course using Python/Django, and Vue.js.

Founder of Columbus Computer Society and SIG Leader of CCS Linux SIG, where I taught/mentored Linux technology for local user group members. Taught "Intro to Linux", "Intro to Python", and "Linux Network Administration" and "Advanced Linux Administration" classes regularly over the years.

## **Selected Employment History and Consulting Projects**

I have worked both employee (W2) and consulting (1099) contracts my whole career, depending on the client's needs. I am comfortable with either situation.

### 2020 - Present, Imaginary Landscape, LLC (W2)

Director of Technology – Manage engineering, project management, and devops group of 5 staff, plus contractors. Responsible for all quotes/estimations, project planning, staff development, and limited programming.

#### 1998 - Present, LANshark Consulting Group, LLC (1099)

President and Founder - Django/Python development shop, full service Linux and Open Source DevOps Integrator.

**LANshark** - Developed over a dozen websites using Wagtail CMS, including a yarn store, china rental, law offices, hair salon and others.

**Fox Sports NFL Foresight 2020 (1099)** – Lead developer on a machine learning/artificial intelligence application to process real-time NFL football statistics and make insights and predictions for their on-air staff, using Python, REST APIs, AWS Kinesis, Lambda/serverless, DynamoDB.

**StreetShares (1099)** - A financial application to support the PPP Loan programs developed by the SBA in response to COVID-19. Python microservice architecture with sqlalchemy, mysql, Docker, and REST api's.

**Synzi (W2)** - Virtual Healthcare online application originally developed with Django backend and REST APIs. Green field rewrite as Flask/Postgres backend with GraphQL and Docker microservices. Frontend is React and React Native. Heavy integration work with Jitsi Videoconference software. This application won awards (MedTech Breakthrough Award for Best Patient Management Solution, 2019).

**Oxford International (W2)** – Took over a failed project for the US Army Threat Security Management Office (TSMO) to help manage penetration testing projects using Django, Ansible, Vyos, Postgres, and Docker. Successfully relaunched the project and extended it to Minimum Viable Product, and released it for use.

**Oxford International (1099)** – Developed a Minimum Viable Product for an "Internet of Things" data collection application using Django and Django Rest Framework to build APIs and front-end. This application used embedded sensors to monitor ore levels on site at client factories, and automatically dispatch refills as needed to ensure timely delivery.

**GreenMars/eXo (1099)** – Developed an ultrasound workflow management system to ensure proper handling of ultrasound examinations in a timely and correct manner, using Django/Python/Postgres.

**Conestoga (1099)** – Full stack developer on web application for the life insurance settlement industry, with django backend and vuejs frontend running on digital ocean and AWS.

**Eldarion (1099)** – Backend developer on e-commerce site using jsonapi and custom rest framework backend with reactJS frontend.

**Cox Media Group (1099)** – Infrastructure platform team supporting internal CMS (Django) and several custom Django applications related to RSS/Atom and AP feeds, search (SOLR) and related technologies.

Intuit TurboTax Pro (W2) – Part of team developing Intuit's Turbotax Personal Pro application. Implemented a new system for hiding all application passwords and credentials in the Intuit Secret Service and rotating the encryption keys on a regular basis. Wrote a utility for rotating the keys on encrypted tax documents stored on S3. Updated the application for better security, improved the Apache web server performance, and worked on various other parts of the system. Note: This eventually became TurboTax's Accountant On Call program.

**NEACH Billing Application (1099)** – Northeast Automated Clearinghouse is a consortium of banks and credit unions which use the Federal Reserve Automated Clearinghouse to transfer funds between banks. Took over a failed Django project to write a billing application that processes files from the Federal Reserve and the internal CRM system, producing PDF invoices and an ACH instruction file for billing each of the NEACH members according to their usage.

**InvestQuest Stock Quoting (1099)** – Developed tools to read real-time stock prices from Barchart on Demand and display on websites for Huntington National Bank, Wendy's International, Bob Evans Restaurants, Rocky Boots, ARK Restaurants, and numerous other clients. Included creating various charts and graphs of stock data over time.

**Server Automation and django upgrades (1099)** – Consulted with an Akron-based company upgrading their django-based product to Django 1.6, build ansible/vagrant/packer scripts to automate development, staging, and production servers.

**University System of Ohio (1099)** – Working under Chancellor Eric Fingerhut, developed the database-driven "University System of Ohio" which aimed to provide equivalent information on all cources offered by Ohio's public universities, and allow for smooth transfer of credits between schools. Developed in PHP with MySQL.

**Qbase, LLC. Custom Build System (W2)** – Created and maintained a custom python/django-based build system which built their Metabase product, produced custom PXE boot images, custom CD/DVD images, and related installer tools for installing, configuring and upgrading the product in-place at customer sites.

Wyred, LLC Dating Websites (W2) - Part Owner - Backend developer on Findfred.com, a highly scalable PHP-based LGBTQ dating web site on a multiserver cluster. Ported code to develop MeetMindy.com, a LGBTQ dating website for females. Over 150,000 subscribers.

**Data Collection for Menard Engine Group (1099)** – Developed a custom python program to run on an embedded computer which was installed in IndyCar's race cars that collected engine management data (gears, temperatures, etc) from sensors mounted on the car, summarized the data, and published it to a web server as the car pitted. Also developed the Linux-based operating system that ran on a single-board computer from an 8GB FLASH drive.

**Director of Technology - PeopleToMySite, LLC. (W2)** - Managed the development shop of a 10 person web development company which managed an application to update auto-dealer inventories overnight, as well as numerous other projects.

#### 2018 - Present, The Ohio State University

Senior Lecturer teaching Web Development (CSE3901) using Javascript, Ruby (Rails) and Postgres/SQLite face-to-face and online.

### 2012 - 2021, Franklin University

Adjunct Professor teaching Enterprise Applications and Patterns (COMP461) and Web Development (WEBD236), face-to-face and online. Also taught Operating System Fundamentals in Saudi Arabia. Developed masters-level Web Development class using Django/Vue.js.

## **Education**

The Ohio State University, Columbus, Ohio MS, Computer Science

1981 Wittenberg University, Springfield, Ohio BA, Biology and Computer Science

### **Publications**

Technical reviewer of several programming books on python and django, as well as author of numerous blog articles and technical papers related to web development.

# **Developer Skills Summary**

### **Very Strong:**

python, django, javascript, git, postgresql, GraphQL, Linux Admin, REST Framework, Docker, AWS, Linode/Digital Ocean, bash

### Strong:

Flask, Falcon, FastAPI, ansible, terraform, Jenkins, Heroku, linux packaging, redis, Vue.js

# Knowledgable:

React, webpack, Gulp, postfix, mailgun