Scott Howard Swain scott@oceanmedia.net Austin, Texas

#### SUMMARY

# "I listen, understand, and adapt before drawing on experience to build relationships and solutions."

A bridge between people and technology. I thrive independently and collaboratively. 30 years full stack dev, writing, team, and lead experience; 7 years ML/AI dev and integration, 20 years master-level cognitive empathy and linguistics study, coaching. https://linkedin.com/in/scottermonkey. Motivated, dependable, well-rounded, innovator.

**People/writing skills relevant to communication, writing, and working with others:** Author of A Practical EmPath: Rewire Your Mind. 20 years' study, practice, and teaching of interpersonal skills, including leadership, group dynamics, mediation, and conflict resolution. 30 years' experience software creation, training, mentoring, leadership, communication, media, and community health. 30+ years of technical writing. A couple hundred examples here.

- 2018-2025 designed, coded, trained EmpathyBot ai.
- Machine learning LLMs since 2018: Claude 3.x, Gemini, GPT-3.x GPT-4o3, and Perplexity prompt engineering; Copilot; extensive API use; creating experts, chatbots; VAs; expert prompt chain creation; RAG; LangChain.
- Python since 2015: web dev; automated testing (PyTest);
   Flask; multi-threading; RESTful API; Event-driven architecture; OCR; NLTK; PyTorch; Scikit-Learn; Pandas.
- Full stack development since 1995: Planning, designing, budgeting, building web/db & SaaS apps; built full-featured WYSIWYG CMS in 1996.
- Front-end since 1995: JavaScript, HTML, CSS; UI/UX Design & build; Adobe Animate; AEM; Photoshop; usability; SEO; 2D/3D animation.
- Database design/use/ETL since 1994:
   PostgreSQL, SQL Server, MySQL, MS Access.

#### **TECHNICAL HIGHLIGHTS**

# Created/trained the full stack of ML/AI "Conversational therapist/personal coach/VA".

- 2018-Current: Empath is a multi-expert AI using cognitive empathy to provide personal coaching and therapy, positively impacts users' mental and emotional well-being.
- Designed, coded, and trained Empath, a natural language processing model initially based on my custom semantic indexing pattern-recognition system created before the advent of large language models.
- Developed UI enabling users to assist in training the model by critiquing responses through multi-choice dropdowns, enhancing model accuracy.
- Created a Python/Flask API integrating NLTK to improve sentiment analysis accuracy.
- Built a Telegram bot to expand accessibility and user engagement.
- Multi-model collaboration between Claude 3.5-Sonnet and GPT-4o/o1 APIs to optimize performance and cost.
- Developed a 4-expert prompt-chain functionality to enhance efficiency and accuracy:
  - Compressor: Summarizes previous dialog to decrease memory use.
  - · Abuse Detector: Assesses user queries for relevance, enforcing content policies.
  - Coach: Processes user input and drafts responses.
  - Editor: Reviews draft for accuracy, looping back to the Coach if revisions needed.
- Currently: (a) Replacing last ASP code with Flask to remove MS IIS dependence, (b) Incorporating RAG (Retrieval-Augmented Generation) using pqVector and LangChain, and (c) moving to a cloud host.

### AI Automation Pipeline & Integration Developer (OceanMedia/freelancer and [founded] CreativeRobot.net)

- Designed, developed, and deployed AI-powered marketing tools, including chatbots and custom GPT models, enhancing client engagement and marketing effectiveness.
- Automated a chain of AI systems using Make.com's tools, Google Sheets, OpenAI's GPTs, Anthropic's Claude models, Perplexity, and more to collaboratively analyze market trends, identify target audiences, conduct research, generate and verify content accuracy, create images, and auto-post on social media platforms.
- Collaborated to customize AI solutions tailored to client needs, contributing to a growth in client reach.

# Senior Python Developer for AdhereHealth, LLC

- Automated complex data and health care-related API processing workflows, reducing manual effort and increasing efficiency across multiple departments.
- Developed a Python app that fully automated the daily processing of PDF prescription invoices, previously handled manually. Resulted in a reduction in processing time and data entry errors.
- Designed and implemented an automated cloud pipeline using AWS services (Lambda, Glue, Boto3, Athena, Textract, S3) to process large batches of patient records with varied structures. This solution reduced manual processing time and improved data accuracy, saving the company many man-hours per month.
- Used generative AI tools for planning and code/data analysis.
- Trained and mentored an offshore development team, enhancing their proficiency in Python and automated testing, improving overall team productivity.
- Collaborated in Agile Scrum teams. Included pair programming.

- Implemented browser automation, web scraping, and pattern recognition algorithms, streamlining data collection and analysis.
- Enhanced healthcare-, pharma-, finance-, and insurance-related applications with automated testing, increasing code coverage and reducing bugs.

**Automated POS data processing** (@ State Park Grocery, TX, freelance as OceanMedia): Challenge: Process 1000s of XML and PDF files of transaction data (unpredictable structure) exported from POS system. Solution 2023: Built a Python app to fully automate: read the files, map their structure, copy results into a database, data analysis, move completed files, saving the store many hours a week of data entry.

**Full Stack Developer/Lead/Architect** (@ Baystar Group): [condensed version] Completed many projects for Baystar and their clients, including: Managed offshore teams to build a Craigslist-like site and various other web/database projects for their clients. Built an Android app to display listings from the Nutshell site database. Much managing/planning/creation of architecture, road maps, timelines, budgeting, and proposals.

## TIMELINE of a FEW HIGHLIGHTS: FREELANCE, CONTRACT (more jobs/details provided upon request)

- 2018-2024: AI Integrator/ML Dev as OceanMedia/freelancer and Creative Robot. Details above.
- 2022-2023: **Senior Python Dev** for AdhereHealth. 6-month contract extended to 12. Details above.
- 2022: **Python Dev** for Rapid7. Rewrote DevSecOps/Cybersecurity app (multi-system vulnerability, fault-analysis of API data, reporting) to increase performance (added multi-threading), modularity, and usability.
- 2021: **Web3/Blockchain API Dev** for Paluritano. Created Python application to mine data from Hive blockchain, automate API querying to analyze, tally rewards, and create reports for user accounts.
- 2019-2020: **Architect/Full Stack Dev** for Road & Yard Masters. Freelance client. Planned, designed, and coded a web-based and responsive inventory management system. Extensive API creation/use. Full stack. Designed their logo and web site. Automated many processes, saving money and manpower.
- 2016-2019: Lead/Architect/Full Stack Dev for Baystar Group. Details above.
- 2015-2016: **Architect/Full Stack Dev** for Roo Delivery. Designed/built web/db Delivery Logistics app to automate client & delivery requests, driver assigns, routes, loads, tracking.
- 2014: **Operations Director** for LightFaktor: Increased company morale, health, and profits through application of cognitive empathy and strategic leadership. Created and implemented processes for streamlined client and vendor communication, enhancing relationships and operational efficiency. Led team-building exercises, yielding increased productivity and a more cohesive environment. Built a Project Management app to improve order and efficiency.
- 2013: **Contract .Net Dev** for Schlumberger. Created and modified apps to automate and analyze spreadsheets of oil & gas industry data, run calculations, validate data accuracy, copy modified data into SQL Server.
- 2007-2014: Technical Consultant & Webmaster for Texas Gulf Bank. Rebuilt site into my CMS.
- 2000-2011: **Tech Consultant/Dev/Team Lead** for Independent Bankers Association of Texas (IBAT).
- 1999-2000: **Webmaster** for Trilogy. UI/UX, usability, accessibility, SEO, team building, and team leadership.
- 1998-1999: **Co-founder/Architect/Team Lead** for Wired Banks. Led team to create web/database application for matching car buyers and lenders, facilitating immediate pre-approval for purchasing.
- 1996: Full Stack Dev for OceanMedia. Created full-featured WYSIWYG CMS.
- 1995-1998: Multiple freelance jobs, including: **Database Trainer** for Database Marketing Group. **Software Dev** for Smith Seguin, San Marcos. **Software Dev** for Cingular Wireless.

### **COMMUNITY CONTRIBUTION**

Currently leading "Practical Empathy Practice Group" (Founded May 2015) - Free meetup group as facilitator/trainer/leader; 2100+ members. Created sister group in Acapulco, Mexico in 2017.

Currently leading "Voluntaryists of Austin" (Founded Dec 2014) - Free meetup group; 1100+ members.

# **OTHER ACCOMPLISHMENTS**

- Author of the "A Practical EmPath: Rewire Your Mind" book. Designed cover art.
- Trained teachers at Children's Discovery Center to use my "Practical Empathy" system.
- Created Play to Evolve physical card game, Android version, and free web-app version. Incorporated my EmpathyBot.net a.i. into the game.
- Self-discipline, flexibility, patience, and dedication: Black Belt Shaolin Kung Fu. Currently providing free classes.
- Technical Writing: ML prompting and system messages, 100's of Tech tutorials & docs, educational, and more.

## **EDUCATION**

- 2008-2009: Adult Continued Education Program: .Net Development Austin Community College 4.0 GPA
- 29+ years of planning, budgeting, design, dev, serving clients, building/leading teams, short/long-term contracts.