Matthew Spahr
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SUMMARY

Software engineer and entrepreneur with working experience at two startups. Founding engineer responsible for taking an idea and releasing it as a viable product. Looking for opportunities to work on challenging problems with talented peers.

EDUCATION

University of Miami Business School
M.S. in Business Analytics (May 2020) - 3.9/4.0
B.S in Business Technology (May 2019) - *3.5/4.0*

SKILLS

Languages
- **Use Every Day:** Python, C++
- **Previously Worked With:** Terraform, R, HTML5, CSS, Javascript, PHP, MySQL

Certifications
- **AWS:** Certified Cloud Practitioner

Frameworks and Software
- **Data Science:** Scipy, Numpy, Pandas, matplotlib, ggplot, Scrapy
- **AWS:** Lambda, API Gateway, Route53, Cloudwatch, Mechanical Turk
- **Database:** SQL (MariaDB/MySQL), NoSQL (DynamoDB)
- **Misc:** git, Xcode, VisualStudio, Jupyter Notebooks, Juce, Zapier

PROFESSIONAL EXPERIENCE

Software Engineer / Founder @ Bullseye Audio (July 2020 - Present)
- Developed and released two cross-platform (macOS, Windows) applications for music producers using C++, with the third product in the testing phase
- Created digital signal processing algorithm with python for automatic loudspeaker equalization using fractional octave smoothing, fast Fourier, and inverse Fourier transforms and rewrote algorithm into working C++ product
- Converted specifications from a patent application into C++ code for frequency response correction of headphones and loudspeaker simulation software using frequency domain convolution
- Developed a user licensing and registration system with Python, AWS (Lambda, API Gateway, DynamoDB), and Terraform, and integrated the system with C++ product, Shopify, and Mailchimp
- Implemented 7 band linear-phase parametric equalizer with 4 latency choices including a zero-latency IIR mode
- Created company website (bullseyeaudio.com) using Shopify and custom code snippets (HTML5, CSS, Javascript)
- Negotiated company founding terms including allocation of intellectual property (provisional patents), equity, and the rights of shareholders

Junior Analyst @ Gradvisor (October 2017 - August 2019)
- Led engineering team to integrate a user pool of 115,000 with the Mailchimp Marketing API and created 35+ automated messages for users at different parts of the onboarding experience
- Created email marketing campaigns that contributed to Gradvisor's 800% revenue growth over 2 years
- Collaborated with the engineering team to aggregate data from more than 50 financial institutions and automate transactions of greater than $250,000 a month

Research Analyst @ Miami Business School, Entrepreneurship Department (May 2019 - September 2020)
- Used Scrapy to create a database of 50 top tier undergraduate entrepreneurship curriculums containing 1300+ course entries, and created visualizations for benchmarking purposes
- Conducted analysis of top entrepreneurship programs and presented findings to Director of Entrepreneurship
- Visualized and projected student enrollment for each business school department through 2025 using R

PROJECTS

Startup Fundraising Consultant
- Worked with boutique investment bank (Equapath LLC) to prepare investment one-pagers and conduct market research for clients
- Prepared investment one-pager for machine learning startup that raised $5m in the pharmaceutical industry

Youtube Influencer Search Engine and Email Collection
- Called Youtube API with Python to store a list of channel URLs, names and subscriber counts for a given search
- Used Mechanical Turk to collect 500 verified business emails for music production influencers for $20

Business Analytics Capstone Project for Lowe Art Museum at University of Miami
- Used Linear Regression to show the museum was underfunded relative to similar institutions
- Pitched benefits of a digital transformation resulting in the adoption of an automated email marketing system, and the creation of two business analytics internship positions for future classes

User Sourced Micro-Dictionary
- Master's Degree Capstone Project with Director of Entrepreneurship @ University of Miami
- Used HTML, Javascript, CSS, and PHP to build an urban dictionary-style website
- Hosted website and MySQL database using AWS LightSail