

Jim Schwoebel

jim@schwoebel.me

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Education

Georgia Institute of Technology

Atlanta, GA

- Bachelor of Science in Biomedical Engineering May 2014
- Awards: Alvin M. Ferst Leadership and Entrepreneurship Award (2014), Outstanding Researcher in Biomedical Engineering Finalist (2014), China Undergraduate Research Experiences Award (2011), President Undergraduate Research Award (2011, 2013), Faculty Honors (2009-2010).

Relevant Experience

[Verily Life Sciences](#) (Google-X spinout): *to make the world's health data useful so that people enjoy healthier lives.*

Engineering Manager, Terra (March 2023-present)

Boston/Remote

- Directly manage >12 engineers (10 senior/3 junior) across 2 teams in [Verily Workbench](#) (VWB Enterprise Team - 7 reports, VWB Solutions Team - 6 reports), a scalable, secure research platform to help biomedical researchers accelerate scientific discoveries.
- Promoted 2 direct reports (+2 in progress) through the promo process (inherited from Google) within the first 6 months of being hired.
- Created/implemented a data strategy within a newly-minted professional services organization (5 of my direct reports) that led to multiple paid engagements with pharma/biotech companies while building reusable assets (e.g. workflows, datasets, and integrations/apps) on Verily Workbench.
- Completed many major feature launches for the VWB enterprise product: auth0 migration, flagsmith (feature flipper), dataproc, dataset collection/versioning, vm-powered app publishing platform (e.g. RStudio), multi-cloud resource creation (AWS/GCP), organization/user management, and file auto-mounting.
- Created individual development plans (IDPs) for every direct report for each to grow personally (in a self-actualized direction) while also growing the business (a new ritual).
- Created/enforced new templates around engineering/product development life cycle (EDLC/PDLC) including templates for quarterly capacity planning, retrospectives, team health, onboarding, quarterly dependency tracking, individual development plans, and a simplified 1 page strategic plan (with defined metrics to hit each quarter).
- Created an escalation and triage process aligned with internal policies (L1-> L4 support), helping to inform creation of enterprise SLAs.
- Assisted in hiring multiple roles: senior software engineer, senior technical writer, senior product manager, and multiple other members of the team.
- Created the data science working group to activate and engage >50 stakeholders internal to Verily on projects related to data science / LLMs.

[DigitalOcean Inc.](#) (NYSE: DOCN): *to simplify cloud computing so developers and businesses can spend more time creating software that changes the world.*

Engineering Manager, Database-as-a-Service (December 2021-March 2023)

Boston/Remote

- Managed >10 senior-level software engineers building out 4+ database-as-a-service offerings (MongoDB, Postgres, MySQL, and Redis) representing significant revenue for the company across the company's >600,000 user base.
- Promoted 3+ direct reports through the internal promotion process - which often involved dealing with shuffling budgets at the Director/VP-level.

- Completed two major, multi-quarter strategic initiatives from conception to beta/release (scalable storage, managed kafka), which were significant revenue drivers for the company.
- Created and directed various rituals in line with company initiatives: retrospectives (biweekly), sprint planning (biweekly), on-call handoffs (weekly), support check-ins (weekly), and VIP customer rituals (bi-weekly).
- Collaborated with senior product managers and tech leads to define 18-24 month internal/external product roadmaps and translated these into actionable JIRA epics that the team could execute with primary/secondary feature owners through 2 week agile sprint cycles.
- Collaborated with other engineering managers and technical program managers to build features across various teams in DigitalOcean to boost net dollar retention of our users (e.g. load balancers, kubernetes service, marketplace, app platform, serverless, and others).
- Recruited (through panels) and onboard new team members (x4 senior software engineers, engineering manager, technical program manager, and senior product manager).
- Worked through and responded to various incidents alongside site reliability engineers and various other teams in DigitalOcean; followed up on incidents with post-incident review sessions to prevent incidents from recurring.
- Created the data science working group to activate and engage >30 stakeholders internal to DigitalOcean on projects related to machine learning and deep learning and activate [the \\$111M acquisition of Paperspace](#) in GPU computing.
- Participated in other working groups within DigitalOcean: DEI committee, open source roundtable, Rust working group, and an internal fellowship/mentoring program.
- Contributed to software capitalization estimates for features as a part of financial reporting for public companies.
- Collaborated on landscape for M&A options for database-related products.
- Worked through a reorganization of the company within 1 month of joining (e.g. with a new Chief Product Officer).

[Sonde Health Inc.:](#) *To unlock voice as a vital sign and meaningful predictor of health.*

VP of Data and Research (August 2020-December 2021)

Boston/Remote

- Managed >20 software engineers, data scientists, and analysts building out cloud-based data collection, publishing, annotation, featurization, and modeling products/microservices.
- Maintained the web product for Sonde Health through SurveyLex (previously in NeuroLex) with a team of 3+ software engineers.
- Set overall data product strategy for the entire organization to achieve 6x the data samples in <1 year within a microservices data platform (>1 million voice samples with health labels).
- Conceptualized and executed internal demo days (every 6 months), leading to strong collaborations across the data, sales, and research organizations (15+ demos).
- Assisted in a smooth transition post-M&A in product roadmaps for SurveyLex and Sonde One to close Sonde's [\\$19.25MM Series B round of financing](#).
- Wrote and submitted a first-author publication alongside Biogen as a collaborator for the Voiceome Study (6,000+ patient longitudinal dataset).
- Co-submitted abstracts to academic conferences like the [CNS Summit](#) and open access journals.
- Actively maintained 10+ pharma and academic research customers (\$300k+ contract value).
- Helped to recruit new team members (data scientists, data engineers, data analysts, and interns).

NeuroLex Laboratories Inc.: *Democratizing voice computing. (acquired by Sonde Health Inc.)*

Co-CTO / CEO (April 2017 - August 2020)

Boston, New York, and Seattle / Remote

- Closed \$315k+ in revenue from customers like Biogen, UCB Pharma, and Pear Therapeutics.
- Raised \$250k+ from Betaworks, Lightspeed Venture Partners, GGV Capital, and Launch Capital.
- Grew cross-functional team from 1-15 people across 4 geographies.
- Scaled product ([SurveyLex](#)) from 0 to 1,000+ users and 500,000+ voice files labeled with health information in less than a year.
- Guided monthly board meetings and wrote yearly strategic plans to focus team goals.
- Prioritized sprint timelines with CTO to ensure successful, on-time product and feature launches.
- Built R&D Lab with [>30 research assistants](#) across 20 universities with <\$5,000, resulting in 7+ peer-reviewed publications.
- Created a machine learning platform (Allie) used by 20+ engineers which prototyped >1,000 voice-based machine learning models (>50 of these models are deployed into production).
- Mentored ~10 NLP, voice, and machine learning modelers and engineers every 6 months who landed jobs at companies like Facebook and Microsoft.
- Wrote a textbook to grow the product team ([Intro to Voice Computing](#), 400 pages); #1 in Kindle book store in the Speech & Audio Processing category on 01/15/2019 (4 months after launch).
- Contributed 15,000+ lines of software alongside the core development team for a Kafka-enabled microservices architecture (3,000+ GitHub commits).
- Awards: [Mass Challenge](#) (2017 - Boston), [Voicecamp](#)/Betaworks (2017 - NYC), [TMCx](#) accelerator (2017 - Houston, TX), [Texas Health Catalyst](#) (2017 - Austin), and [Psychiatry Innovation Lab](#) (2016 - 1st place).

Mentor/Advisor: *I've been lucky to mentor >60 people over the past few years:*

- **Currently:** [QuForce Fellows Program](#) (10 fellows), [QuSecure](#) (Advisor), [VocaliD](#) (advisor, acquired by Veritone), [MedTech Women CEO circle program](#) (5 women), [UMass Boston](#) (Industry Advisory Board / mentoring 5 graduate students), and the [STEM Advocacy Institute](#) (Mentor).

Skills and Hobbies

Skills: Agile, Building Teams (CEOs/CTOs, SWEs, Engineering Managers, Product Managers, Technical Program Managers), Databases (MongoDB, Postgres, MySQL, and Redis), Distributed Teams, Flask (Python), Go, Google Drive, HTML (React components), Javascript, Jira, Kafka, Kubernetes, Machine Learning/Deep Learning (PyTorch), Mentorship, Microservices, Microsoft Teams, Natural Language Processing (NLP), PagerDuty, Patents, Product Management, Python, Rapid Prototyping, R&D, Research Papers, Rust, Slack, Speech Recognition, Startups, Trello, Voice Computing, Web Scraping (BeautifulSoup), and Writing.

Hobbies: Basketball, Programming, Running, Teaching/Mentoring Others, and Writing Philosophy.

Recent Projects

1. **[2023].** 🗣️😊 [Nala: fastapi-voice assistant framework](#). A fastapi voice-assistant framework to quickly prototype LLM-powered voice assistants in <5 minutes.
2. **[2022].** 🐍🗣️🔧 [DOpg CLI](#). A python command line interface for DigitalOcean postgres clusters (5+ integrations). 3rd place at internal DigitalOcean Shark-a-hack.

3. [2021]. 🧑👁️ [Vibe](#), an all-purpose eye tracking web application and API for Alzheimer's disease research (3 tasks, <3 mins). 1st place at the [2021 UW CNT Hackathon](#).
4. [2020]. 🤖 [Allie](#), a machine learning framework for audio, text, image, video, or .CSV files (50+ featurizers and 15+ model trainers).
5. [2019]. 🗣️ [Voicebook: get started programming voice applications in Python](#). A book and repo to get you started programming voice applications in Python - 10 chapters and 200+ scripts.
6. [2018]. 📊 [AudioSet: 527 machine learning models for acoustic events](#). This repository makes it easy to apply 527 machine learning models for event detection from AudioSet on new audio files.

Books / Publications

1. Bang Tran; Youxiang Zhu; Xiaohui Liang; **James W. Schwoebel**; Lindsay A. Warrenburg. "[Speech Tasks Relevant to Sleepiness Determined With Deep Transfer Learning](#)." *ICASSP 2022-2022 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)*. IEEE, 2022.
2. **Schwoebel, James W., et al.** "[A longitudinal normative dataset and protocol for speech and language biomarker research](#)." *medRxiv* (2021).
3. **Schwoebel, J.** (2018). [An Introduction to Voice Computing in Python](#). Boston; Seattle, Atlanta: NeuroLex Laboratories. (1000+ citations).