

EDUCATION

- **Queen Mary University of London** London, U.K.
Masters of Electrical Engineering in Sound and Music Computing, Center for Digital Music (C4DM) Sept. 2020 - Sept. 2021
- **Oberlin College & Conservatory** Oberlin, OH
Bachelor of Arts in Computer Science and Economics, Concentration in Classical Piano Aug. 2012 - Dec. 2015

EXPERIENCE

- **Native Instruments** Berlin, DE
Senior Software Audio Engineer December 2021 - Present
 - Engineer and develop key audio components for Kontakt to enable instrument builders and music production creators.
 - Build, from scratch, and new UI scripting interface for VST and instrument builders.
 - Publish extensive documentation and create an on-boarding hub and development forum in order to strengthen NI Kontakt community and ease usability.
- **Pluggd, Denise Audio** Berlin, DE
[Freelance Lead] Audio Engineer February 2020 - November 2020
 - Collaborator and apprentice of developed VST plugins applications.
 - Lead engineer for a WIP custom, framework independent, licensing system for plugin authentication and allows producers to independently distribute, patch, and work collaboratively on their plugins.
 - Developed application and production services with a range of technologies including a GraphQL based Typescript application, LambdaOnEdge functions, and a Golang backend. Manage infrastructure stack across AWS and Heroku via terraform.
- **SoundCloud** Berlin, DE
Senior Production Engineer Jan 2019 - March 2020
 - A combined Systems, Infrastructure, and SRE role focused on high availability, scalability, and an efficient realisation of developer, product, and business needs.
 - Ran and maintained open source technologies at scale such as MySQL, Kubernetes, and Cassandra. Also provided self service tools for developers to interact with these technologies.
 - Provided DNS solutions and managed a secure networking stack, including reliable DNSSRV solutions and multizone routing.
 - Provided teams with architecture and engineering support, including running "Uptime Academy" for all engineers company wide.
- **SoundCloud** Berlin, DE
Media Streaming, Engineer June 2017 - December 2018
 - Engineered audio streaming and transcoding micro-services to enable seemingly instant playback using C and C++ integrations with Go services, Kubernetes, and AWS to millions of daily users world wide.
 - Rolled out HQ [AAC 256] audio streaming feature available to all SoundCloud Go+ subscribers.
 - Scoped and rolled out to all users a high efficiency audio codec option for streaming [Opus/Ogg 64] in order to maintain quality while saving data.
 - Optimized on the two most business critical KPIs: "Time to Play" and "Time to Transcode" by improving our transcoding and transmuxing performance, iterating on our CDN caching strategy, and implementing efficient segmented audio indexing.
- **The New York Times** New York, NY
Platform, Engineer February 2016 - April 2017
 - Developed BFF pattern APIs for *NYT's User Hub* in Golang.
 - Lead developer for all *Cancel Subscription Online UserHub* microservices including the new Prometheus integration for analysis.
 - Maintained and developed features for the back-end API servicing Content Delivery and Login and Registration systems.

PROJECTS

- **SWOON**: Co-founder, curator, and resident DJ for a Berlin based electronic music collective called *SWOON*. In addition to curating the sonic tone of the mix series, I also co-produced all design, templating, and branding for the project using Photoshop, AfterEffects, and Illustrator.
- **Clean Scene**: Co-founder of Clean Scene, a climate action collective exploring alternative futures for the dance music community. Wrote and published a report of the impact of touring DJs in the electronic music scene on the environment.
- **WOMB Symposium**: Support staff and volunteer for the Symposium for Gender Equity in the Creative Industries.
- **The Workshop on Forster**: Active contributor at this womyn* and non-binary art collective. In addition to having written the website, I help program audio workshops, maintain the studio space, and aid in sound engineering and recording for others in the community.
- **Girls Who Code**: Led a middle school Girls Who Code chapter at Renaissance Leadership Academy in Harlem, NYC.

GRANTS, ACCOLADES RESIDENCIES

- **ADC Diversity Scholarship 2018**: A sponsored trip and attendance to the Audio Developers Conference in London awarded to ten applicants.

SKILLS

- **Human Languages**: English [C2], German [B1]
- **Computer Languages**: Golang, C, C++, Python, bash, Ruby, Java, TypeScript, ReactJS, Clojure
- **Technologies**: Kubernetes, Docker, AWS, terraform, MySQL, Elasticsearch, ffmpeg, tensorflow, Prometheus, Chef, Puppet, Bind9, Consul, etcd, Unbound, Quagga, Traefik
- **Operating Systems**: Mac OS, Linux