

About

I'm a software engineer with experience designing and building full stack systems with a focus on the sciences. I'm particularly interested in supporting teams to ship high quality production-grade software, and moving products from research & experimentation to complete user experiences. I've worked in deeply scientific organizations, rapidly growing startups, and design-led companies, and love to collaborate with multidisciplinary teams.

Professional Experience

Moon Creative Lab (2020 - present)

Venture studio that creates new businesses from zero to one.

Senior Technical Lead & Engineering Manager

- Management of the Moon engineering team across US & Tokyo offices. Worked extensively on team development, allocation, OKRs, with numerous promotions during my tenure.
- Responsible for software design, quality, and collaboration across disparate venture projects & technology stacks. Ran Moon's first engineering offsite & Moon's first hackathon, which evolved into a global twice-annual pitch & development event for the entire organization.

Technical Lead, Early Stage Project

- Built & led Moon's first team to ship a software product from zero-to-one, including all aspects of team formation, roadmapping, software quality, development process, culture, and design & product partnerships within the team.
- Responsible for many aspects of technology foundations for Moon including cloud providers, SCM, IAM, DNS, software standards, engineering team OKRs.
- Responsible for job descriptions, hiring process, team requirement scoping, and screening, and extensive interviews at all levels of the organization.

Skills: Team leadership & growth, foundation building, budgeting, cloud (AWS, GCP), Docker, Kotlin, Typescript, no-code, Github/CI, Jira.

Leeward Co. (2016 - 2020)

Software consultancy specializing in engineering, MLOps & data pipelines for the sciences.

Co-Founder & Principal Engineer

- Engineering founder of a consultancy that worked with organizations to build data products in the cloud, achieved > \$1m revenue annually.
- Built a nimble data engineering & science team to work on client domains including climate & weather, satellite imagery processing, shipping & logistics, acoustic analysis, materials technology, insurance and risk, DL & ML across cloud providers (AWS, GCP, Aure).
- Responsible for all aspects of a business: client communication, scoping & definition, costs, quality, planning & estimates, staffing, and delivery.

Skills: Client management, planning & scoping, serving & storage systems (k/v, document, blob, relational) across major cloud providers (AWS, GCP, Azure), containers, Spark, Jupyter, Python.

The Climate Corporation (2011 - 2015)

AgTech company helping farmers optimize yield through weather & agronomic modeling.

Staff Engineer, Data Platform

- Designed, built, maintained production critical data systems supporting model development and the application stack at scale in an organization of 300 scientists & engineers. Responsible for re-architecting data services as part of a company-wide shift from shared to vertical ownership.
- Led company-wide discipline - "Data Storage Systems" - to align and educate teams on storage solutions and data systems. Hosted multiple external storage system providers and led discussions on geospatial storage implementations across the company.

Senior Engineer, Application Stack

- Re-designed and implemented The Climate Corporation's multi-product front-end web stack with strict client/service separation.
- Implemented rich geospatial & web based mapping experience and sales flow for the company's most important sales year, for which I was recognized with Climate's highest individual award - "Finding the possible in the impossible".

Software Engineer, Platform Team

- Built data tools & prototyped new products.

Skills: System design, project leadership, EMR, geospatial storage systems (Elasticsearch, Lucene, PostGIS), distributed systems, Clojure, Python, Ruby, Javascript (Backbone, GeoJSON, Leaflet).

Google (2008 - 2011)

Developer, EMEA Operations Team

- Designed and implemented a system to monitor thousands of Google Adwords accounts and notify sales individuals of discrete high-value account modifications in real-time. Deployed to hundreds of salespeople, supporting 100s of QPS at peak.
- Grew to lead the EMEA operations tooling team to develop web services deployed globally to operations & sales teams. Focused on full-stack metrics and reporting: dashboarding and interactive web reports.
- Led development of data capture and processing tools for the EMEA Business Intelligence team, resulting in an EMEA "Platinum Award".
- Recognized at Google in multiple ways including an "Approaching astounding performance" performance review, early promotion, & Python readability - required to submit production Python code at Google.
- Worked directly with external customers on Google Analytics support & implementations.

Skills: Python, Google App Engine, Javascript (RaphaelJS, Gviz, JQuery), Browser extensions, relational stores, Bigtable, Protocol Buffers, Stubby (gRPC), Google Analytics.

Education

- **M. Sc Computer Science (2011)** - 1st Class Honors (UCD, Ireland)
- **B. Commerce Management Information Systems (2008)** - 1st Class Honors (UCD, Ireland)