Nicholas LiCalzi

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● Brooklyn, New York

💼 Professional Experience

Co-Creator, Software Engineer   2021
Dendro

Dendro is an open-source, serverless monitoring framework for small, distributed applications. You can find our case-study at getdendro.com ⌕

- Project managed a remote team of four co-creators across the USA from ideation through presentation.
- Architected and built a fully serverless, auto-scaling, streaming ETL pipeline using AWS Kinesis Data Firehose, S3, and Lambda to centralize logs and metrics from collection agents on remote nodes in a distributed system to a central AWS Timestream database.
- Built a CLI wizard used to easily configure and deploy Datadog's Vector as a collection agent on distributed servers, as well as for deploying, listing/reviewing, and tearing down the core pipeline.
- Engineered a dashboard and exploration platform for querying and graphing the collected monitoring data from AWS Timestream (time-series DB) in near real-time using React, VictoryChart, and NextJS.
- Coordinated production of slide deck and technical case study, which you can find at getdendro.com ⌕.

Software Engineer   2019 - 2021
Self-Employed

Developed open source software, some highlighted projects include:
- **Jello**: full-stack project management app using React/Redux, an Express RESTful API, MongoDB, and more.
- **Request Bean**: an app for collecting and inspecting HTTP/webhook requests. Built with Rails, Action Cable, Active Job, Redis, and PostgreSQL.

Urban Data Scientist   2017 - 2019
Kohn Pedersen Fox

- Data and geospatial analysis using the Python data science and visualization stack (sklearn, Pandas, etc.), ArcGIS/QGIS (mapping), Rhino/Grasshopper (3D design & visual programming).
- Published an academic paper proposing a performance-based zoning methodology ⌕.

🧠 Skills

Languages	**Frameworks**	**Misc. Technologies**	**AWS Cloud**
Ruby, JavaScript, Python, Go, SQL, HTML/CSS	*Node.js, React, Redux, Rails, Express, Sinatra*	*Git, Github, Linux, HTTP, OOP, RESTful API, PostgreSQL, MongoDB, Algorithms, Big Data*	*Kinesis, Lambda, S3, Timestream, CloudWatch*

🎓 Education

Software Engineering (Capstone)   2019 - 2021
Launch School ⌕

Multi-year, mastery-based software engineering curriculum. Read more at launchschool.com/employers ⌕

M.S. Applied Urban Science & Informatics   2018 - 2020
New York University, Center for Urban Science and Progress

NYU CUSP is a research center dedicated to data/technology-driven solutions to urban problems, linking data science, statistics and analytics.

B.A. Metropolitan Studies   2011 - 2015
New York University

University Honors Student / Founders Day Award recipient