

Nicholas LiCalzi

🖱 www.nlicalzi.com 🌐 www.github.com/nlicalzi ✉ nicholas.licalzi@gmail.com ☎ (646) 351-9917

📍 Brooklyn, New York

📁 Professional Experience

Co-Creator, Software Engineer

Feb 2021 – Jun 2021

Dendro

Dendro (getdendro.com 🌐) is an open-source, serverless monitoring framework for small, distributed applications.

- Led a remote team of four engineers across the USA through ideation, design, development, and release.
- 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 (their new, serverless time-series 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.
- Authored technical case study and tech talk, which you can find at getdendro.com 🌐.

Software Engineer

Sep 2019 – Jan 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

Oct 2017 – Sep 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 a paper 🌐 proposing an environmental performance based zoning methodology for cities.

🧠 Skills

Languages

Ruby, JavaScript, Python, Go, SQL, HTML/CSS

Frameworks

Node.js, React, Redux, Rails, Express, Sinatra

Misc. Technologies

Git, Github, Linux, HTTP, OOP, RESTful API, PostgreSQL, MongoDB, Algorithms, Big Data

AWS Cloud

Kinesis, Lambda, S3, Timestream, CloudWatch

🎓 Education

Software Engineering (Capstone)

2019 – 2021

Launch School 🌐

Multi-year, mastery-based software engineering curriculum, with progression gated by written exams and live coding interviews to develop problem-solving skills. 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