

# Nick Doiron

## **Software Engineer (Expert Level), HP Enterprise - 2021-Present**

Full-stack development on machine learning platform (Determined AI)  
Designing and building APIs for streaming ML metrics, model registry info  
Stack: Python, Go, TypeScript, PostgreSQL, gRPC, Docker

## **Software Engineer, MGGG Redistricting Lab / Tufts U. - 2019-2021**

Lead developer on participatory mapping and analysis platform (Districtr)  
Aggregating and visualizing Census data from shapefiles in MapBox  
Deployment on AWS (VPC containing Lambda functions and RDS DB); Netlify

## **Senior Software Engineer, McKinsey & Company - 2018-2019**

On-site data scientist – feature engineering and frontend for real estate market  
Lead developer on data visualization project

## **Senior Applications Developer : The Asia Foundation - 2015-2016**

Coordinated data collection, election information API, and map-athon

## **Web Developer : Museum of Modern Art (NYC) - 2014-2015**

Ruby on Rails, HTML / CSS / JavaScript for MoMA's mobile site and iOS API

## **Software Engineer : Civis Analytics - 2013-2014**

Ruby on Rails for a data science platform, map visualizations  
Processing large CSV files and SQL queries for various customers

## NLP

Co-Author in BIG-Bench participatory benchmark [arxiv.org/abs/2206.04615](https://arxiv.org/abs/2206.04615)

NLP models used or referenced (Google Scholar link) [bit.ly/monsoon-nlp-refs](https://bit.ly/monsoon-nlp-refs)

Workshop on Transformers, Adapters, GPT Decoders for ML Prague

[github.com/mapmeld/nlp-workshop](https://github.com/mapmeld/nlp-workshop)

## SKILLS

HTML / CSS / JavaScript (including React, TypeScript, D3)

Server languages: Python, Go, PHP when necessary

Dev Ops: AWS (EC2, S3, Lambda); Apache / Nginx; LetsEncrypt / TLS

Databases: PostgreSQL, MongoDB, Neo4j

Geospatial: MapBox GL, Google Maps API, OSM contributor

## TECH COMMUNITY

2012 Code for America fellow; 2013 GIS Innovation Intern at City of Boston

Presented at DEF CON Crypto Village and IAEA Safeguards Symposium (2018)

Participated in *International Law and AI* mini-course, Asser Institute (Jan. 2020)

Taught workshops on Data Visualization and Mapping

Re:Coded's refugee training in Turkey and Iraqi Kurdistan (2019)

PyCon Zimbabwe (2018) and PyCon India (2019)

JSConf Iceland (2016) and JSConf Colombia (2017)

## OTHER OPEN SOURCE

- Added i18n/l10n features to OpenStreetMap, MetaMask crypto wallet
- Contributed code to SimpleTransformers and examples to Transformers and AutoKeras
- First language models posted on HuggingFace for Hindi, Tamil, Bangla
- US Digital Response - set up COVID response site for NJ Econ Dev Agency
- Fortran.io web server - a popular Fortran repo on GitHub
- Quantum computing library (jsQuil) compatible with Q#, Quil, Cirq