

NICK DOIRON

EXPERIENCE

PRINCIPAL SOFTWARE ENGINEER, Silicon Valley Bank — Spring 2017-Present

Building financial tech APIs in Clojure (functional programming) and secure SDKs for other languages
Test-driven development, code review using Phabricator, Arcanist, Jenkins

INDEPENDENT CONTRACTOR, GeoReactor — Fall 2016 - Spring 2017

Contract creating tools to curate and import data from Esri/ArcGIS GeoServices into OpenStreetMap
Rendering Arabic, Divehi, and other languages in OpenStreetMap iD editor, Tangram API
Crowdsourcing app, with Facebook Messenger bot integration
Presentations at JSConf Iceland, UNCS-Macao, Code for HK, Code for Japan, LibrePlanet, CodeConf

SENIOR APPS DEVELOPER, Asia Foundation — 2015 - 2016

Designed and built NodeJS server to provide candidate information for Myanmar's 2015 election
Coordinated Mongolia map-athon, including drone imagery, HOT task manager, tracking teams' progress
Forked NYPL's crowdsourcing platform to digitize and label maps from Indian NGOs

WEB DEVELOPER, Museum of Modern Art, New York — 2014 - 2015

Ruby on Rails and front-end for MoMA's redesigned website, mobile app backend, and Raspberry Pi
Pair programming office, collaborative design from PDF specs and sketches

SOFTWARE ENGINEER, Civis Analytics, Chicago — 2013 - 2014

Ruby on Rails for a data science platform, including surveys, map, charts, syntax highlighting
Test-driven development using Rspec, Capybara, Travis CI, and code reviews

GIS FELLOW, City of Boston GIS Department — Summer 2013

Deployed civic apps for bike lanes, voting, public safety, and locally-based startups
Launched homepage and full-screen map for Boston Redevelopment Authority (now BostonPlans.org)

WEB DEVELOPER, Datamade, Chicago — Spring 2013

Collaborated with civic activists to visualize public health, new transit plans, environmental sensor data

CODE FOR AMERICA FELLOW, San Francisco — 2012

Interviewed government officials and community organizers to conduct need assessment
Housing, disaster response, accessible Q&A, and transit apps for local governments
Opened years of data on neighborhood level for community groups to show their impact

TRAVELING TEACHER / DEVELOPER, One Laptop per Child — 2010 - 2013

Developed new math, science, geography, and language-learning activities in Python
Traveled to develop content for schools in Uganda, Uruguay, Haiti, Mongolia, Nepal, and Majuro Atoll

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OPEN SOURCE PROJECTS

JS-Quil - instructions for quantum computers in JavaScript - based on Rigetti Computing's Python library and Quantum Virtual Machine (QVM)

Noonniep - livestreaming video of an Arduino, and allowing visitors to reprogram it using a block-programming language (Google Blockly). Returns data via web sockets (socket.io)

TensorFlow as a Service - Image Analogies / AWS experiment where people can create and customize their image in the browser

CartoDrop - fork of secure whistleblower platform and Tor hidden service SecureDrop, with focus on server-side rendering of maps (Python, Mapnik)

SKILLS

In web development

Full-stack JavaScript including NodeJS (Express/Koa), React

Responsive CSS and pre-processors (SASS/LESS)

Ruby on Rails, Python (Flask / AppEngine); less frequently Go and PHP

Deployment on AWS EC2, Lambda (with Serverless), DigitalOcean, Heroku

Setting up TLS certs with LetsEncrypt; key-pinning; post-quantum encryption

Git and GitHub

In databases

PostgreSQL / PostGIS, MySQL, SQLite

NoSQL: MongoDB, Neo4j (graph database), Redis

In languages

Conversational Japanese and Spanish

Basic Arabic (UAE / Gulf dialect)

18n/10n with specializations in Arabic, Burmese, CJK, and Devanagari scripts