

|          |                |          |                                     |
|----------|----------------|----------|-------------------------------------|
| Phone    | (240) 688-7187 | Email    | cv@johnduncan.io                    |
| Location | Washington, DC | Homepage | https://johnduncan.io               |
| Status   | US Citizen     | Github   | https://github.com/johndduncaniii   |
|          |                | Linkedin | https://linkedin.com/in/johndduncan |

MOTIVATION

Making things that are useful to people and that work well.

EMPLOYMENT

|                         |                                          |
|-------------------------|------------------------------------------|
| <b>Quorum Analytics</b> | Washington, DC<br>(50 to 70+ hours/week) |
|-------------------------|------------------------------------------|

|           |                          |
|-----------|--------------------------|
| 2022–2024 | Senior Software Engineer |
| 2020–2022 | Software Engineer II     |
| 2018–2020 | Software Engineer        |

Python, Django, SQL, PostgreSQL, JavaScript, TypeScript, React, Redux, D3, HTML, CSS, React Native, PostGIS, Elastic

Wrote and launched over a dozen flagship products for Quorum Analytics, the industry leading public affairs platform. I consistently solved the team’s most complex technical challenges while delivering projects on time, in scope, and under budget.

- Instrumental in helping scale ARR from \$9M to \$64M+.
- Led cross-functional projects in collection, organization, and presentation of legislative, regulatory, compliance, financial, geospatial, and user-generated datasets.
- Authored 5k+ commits, 1k+ code reviews, 700+ PRs, and conducted 100+ technical interviews.

| Projects      |                |            | Duties                                | Leadership                      |
|---------------|----------------|------------|---------------------------------------|---------------------------------|
| PAC Hybrid    | Technical Lead | Team of 10 | Mentorship, coaching, onboarding      | Wrote first design system       |
| Quorum PAC    | Technical Lead | Team of 8  | Code Review (async, collaborative)    | Created full-stack guild        |
| Search UI/UX  | Technical Lead | Team of 4  | Interviews (technical, design)        | Led apprenticeship program      |
| Dashboards    | Technical Lead | Team of 2  | Tests (regression, integration, unit) | Mentored dozens of engineers    |
| Transcripts   | Frontend Lead  | Team of 2  | Technical Design Documents            | Onboarding coach                |
| Bulk Actions  | Technical Lead | Team of 1  | Product Requirements Documents        | Upgraded major dependencies     |
| International | Full-stack     | Team of 2  | Technical Documentation               | Discovered bug in Google Chrome |
| Regulations   | Full-stack     | Team of 1  | “Learning Lab” presentations          | Longest tenured engineer        |
| Search        | Full-stack     | Team of 2  | Daily deployment, 24hr on-call shifts | Rockstar of the Quarter         |

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|---------------------------------------------------------------------------|----------------------------------|
| <b>Massachusetts Institute of Technology: Lincoln Laboratory (MIT LL)</b> | Lexington, MA<br>(40 hours/week) |
|---------------------------------------------------------------------------|----------------------------------|

Summer 2016 | Research Intern

Java, Android SDK, Google Maps SDK, JavaScript, ExtJS, HTML, CSS, SQL, Acme (Plan 9)

Wrote Local Evacuation Alert Verification (LEAV, sponsored by DHS S&T) for HURREVAC-eXtended (HVX, sponsored by FEMA) with the Humanitarian Assistance and Disaster Relief Systems (HADRS) group at MIT LL on Hanscom AFB.

- Designed and built LEAV, an Android application that routes hurricane evacuees to shelters, visualizes evacuation zone status in an interactive map, and facilitates communication between Emergency Managers (EMs) and evacuees.
- Developed an interactive LEAV web module which enables Emergency Managers to update, visualize, and monitor the status of state evacuation zones in the HVX web interface.
- Reduced WFS-T request size by an order of magnitude.

TECHNICAL SKILLS

|                  |                                                                                                     |                        |                                   |
|------------------|-----------------------------------------------------------------------------------------------------|------------------------|-----------------------------------|
| <b>Languages</b> | Python, JavaScript, TypeScript, Go, SQL, L <sup>A</sup> T <sub>E</sub> X                            | <b>SCM &amp; CI/CD</b> | Git, Github, Jenkins, Travis      |
| <b>Databases</b> | PostgreSQL, PostGIS, Elasticsearch, SQLite                                                          | <b>Infrastructure</b>  | Docker, Kubernetes, Ansible       |
| <b>Web</b>       | Django, React, Next.js, D3, HTML5, CSS3                                                             | <b>Observability</b>   | Sentry, Datadog, Grafana          |
| <b>Devops</b>    | AWS (EC2, RDS, S3, Lambda, DMS, Route53)                                                            | <b>Design</b>          | Figma, Invision, Sketch, GIMP     |
|                  | Atlassian (Jira, Confluence, Opsgenie), G Suite                                                     | <b>Unix</b>            | sh, pkg-src, brew, x11, plan9port |
| <b>Libraries</b> | npm, Babel, Webpack, Gulp, Cypress, Mantine, Styled Components, Stylus, Jest, react-testing-library |                        |                                   |

EDUCATION

|                                                                                      |                             |
|--------------------------------------------------------------------------------------|-----------------------------|
| <b>Gettysburg College</b>                                                            | Gettysburg, PA<br>2013–2017 |
| Bachelor of Science in Computer Science (3.60, HONORS) and Philosophy (3.73, HONORS) |                             |
| Class of 2017 Outstanding Computer Science Student Award                             |                             |

PERSONAL PROJECTS

In my free time, I enjoy working on creative and idiosyncratic projects. I recently scraped and analyzed the Electronic Code of Federal Regulations and extended bob—a Golang query builder—with Django features and syntax. I previously ported James Ashton’s X-Face decoder from C to Golang, wrote wiki and blog platforms in Golang, found a bug in the Google Chrome URL parser, discovered a novel method to losslessly convert Susan Kare’s Macintosh fonts from Classic Mac OS resource forks to macOS data forks, wrote a JavaScript weather script with retro bitmaps, created a 3x4 bitmap font, wrote a Mozilla add-on to display ‘face’ images embedded in email and newsgroup message headers, and won a Gentoo Linux interface design competition. My personal, professional, and open-source work is detailed in my CV: <https://johnduncan.io/cv.pdf>.