John D. Duncan, III

Home Address

Home Address

https://github.com/JohnDDuncanIII

Phone Number

duncanjdiii+jobs@googlemail.com

https://dataswamp.org/~john/

Work Experience

Quorum Analytics   1050 Connecticut Avenue NW, Washington, DC
Software Engineer II (60 hours/week)   *September 2020 - Present*
Software Engineer   *March 2018 - September 2020*

- Developing code that collects, interprets, organizes, and presents legislative and user-generated data on the Quorum SaaS platform.

  - Wrote the **Dashboards** feature   full stack, pair
  - Upgraded to **React 16** and **Enzyme 3**   frontend, independent
  - Wrote the **Committee/Presidential Transcripts** feature   frontend, independent
  - Wrote the **Bulk Actions** feature   full stack, independent
  - Wrote most of the client-facing portion of the **International** product   frontend, independent
  - Re-wrote and now independently maintain **Search**   full stack, pair
  - **Legacy bug fixes/enhancements**, **deployment**, **on-call**, dev-ops,   full stack
  - Served as **onboarding mentor** to two full stack engineers and an engineering manager.
  - **Interviews** (phone/onsite, technical/design), "**Learning Lab**" presentations, organization of weekly dev-team **social events**

Massachusetts Institute of Technology: Lincoln Laboratory (MIT LL)   Lexington, MA
Software Engineering Research Intern (40 hours/week)   *Summer 2016*

- Worked with the Humanitarian Assistance and Disaster Relief Systems Group (Division 4 Group 44) on the **Local Evacuation Alert Verification** (LEAV) program for **HURREVAC-eXtended** (HVX). Wrote and designed an **Android application** for end users (LEAV) and a **JavaScript** (EXT-JS) module for the Emergency Manager front-end (HVX). Agile development cycle. Participated in a DHS defense workshop. Applied for DoD Secret Clearance. Slides and Supervisor's Assessment available upon request.

Gettysburg College Computer Science Department, Lakewood Country Club, SysArc, Dominos
Internship/Work Experience   *2009-2016*

Technical

Languages	**JavaScript**, **Python**, **Go**
Databases	**PostgreSQL**, CockroachDB
Web	**React**, **ES5/6**, **HTML5**, **CSS3** (Styled Components, Stylus), **DOM**, XUL, XPCOM
Tools	**Git**, **Sublime Text**, **Emacs**, **GIMP**, **Regex**, LaTeX, Blender, irc, Jira
Unix/Plan9	**macOS**, **Darwin/XNU**, OpenBSD, plan9port, 9front, GNU/Linux, Android
	Sh, **Sed**, Awk, Grep, Rc
	XQuartz, pkg-src, homebrew, macports, ffmpeg, cygwin
Images/3d	html/svg $\Rightarrow$ png/jpeg/svg/pdf conversion, **xface**, xbm, xpm, blit ikon, base64, picons, ogre3d

- Disclosed two bugs in the Gettysburg Campus Navigation Portal (CNAV) electronic record keeping system. The first allowed any user to **delete** any other **user account** from a CNAV 'group' (mailing list). The second **leaked** all internal account images to the web. Received a cash award.

Side Projects (`http://cs.gettysburg.edu/~duncjo01/assets/portfolio.html`)

- **messagefaces**: XUL/XPCOM add-on that displays popular & recondite 'face' images from email headers.
- **weather**: JavaScript on my homepage that displays a 7-day weather forecast using art that I made.
- **faces**: Go library that converts an XFace to PNG and performs picon lookups from a picon database.
- **blog/wiki**: Go micro-(blogging/wiki) platform.
- **macfonts**: Converted all '80s resource fork Macintosh fonts to data fork fonts for use on macOS.
- **pokersquares**: Designed/wrote an Android app that uses an Expectimax NARL AI player.
- **redlight**: Designed/wrote an Android app that uses an ANN AI player for the game of Pig.
- **hog**: Managed and designed/wrote an Android app that plays a modified version of the game of Pig.
- **screenfetch**: Ported the popular system information script to macOS.
- **archive**: Archived many esoteric patterns, bitmaps, clip art, screensavers, and fonts from 1973-1999.

Education

B.S. in Computer Science Honors (3.60) **and Philosophy** Honors (3.73)   *May 2017*
Gettysburg College, Gettysburg, PA

Outstanding Computer Science Student Award   *Class of 2017*
Eisenhower Institute Undergraduate Fellow   *2016-2017*
Dean's Honors List   *Fall 2015/2016, Spring 2017*
Dean's Commendation List   *Fall 2013*

Computer Science

Capstone *Adam's Wellness Family Connection Website Team Project*   Adviser: Dr. Rod Tosten

- Presented **seven colloquia** to the department and broader Gettysburg community.
- Represented the Computer Science Department during the **Spring 2016 Get Acquainted Day**.
- Organized & facilitated two "**Hour of Code**" sessions for local students in the Adams County area.
- Led **three teams** that completed Android applications (two of which were published).

Philosophy

Thesis *Virtual Futures: Virtuality as Political Praxis*   Adviser: Dr. Lisa Portmess
Capstone *Infinite Horizons: The World to Mind Question*   Adviser: Dr. Daniel DeNicola

- Co-moderated a Philosophy Department **Socratic Club Seminar** about the future of work.
- Writing samples available upon request.

Eisenhower Institute Undergraduate Fellow

Program offers a select group of eight Gettysburg College students the chance to develop their **leadership skills** and knowledge & understanding of **public policy**. Our research focus was refugee policy and our adviser was **Dr. Shirley Anne Warshaw**, Harold G. Evans Chair of Eisenhower Leadership Studies.

- Researched and wrote the 'New Technologies' section for our **State Department Diplomacy Lab** White Paper on **Health Care Records** in **Mixed-Migration settings**. We presented our findings to the *Office of Economic Security, International Health and Biodefense Population, Refugees, and Migration* at the State Department.
  - Physical research for this project included: a trip to the United Nations, dinners, and in person meetings with experts in Europe and resettled Syrian refugees in Pennsylvania.

- Co-organized and moderated two panels that detailed current issues in **public policy**, **national security**, **civics**, and **refugee rights**.

- Gave a presentation detailing our research to the **EINAC** (Eisenhower Institute National Advisory Council). Members of the EINAC include the granddaughter of a past U.S. president, the president of Gettysburg College, a member of the 9/11 Commission, and other notable donors and alumni.

Presentations (`http://cs.gettysburg.edu/~duncjo01/assets/about.html`)

Talks

- Socratic Club Seminar (future of work) *Spring 2017*
- Computer Science Capstone Colloquium *Fall 2016*
- Internship Colloquium *Spring 2016, Fall 2016*
- Computer Science Department "Get Acquainted Day" *Spring 2016*
- Hitchhiker's Guide to Computer Science Colloquium *Fall 2015/2016, Spring 2016*
- Gettysburg College Celebration *Spring 2015/2017*

Planned/Moderated

- Programming Competition Colloquium *Spring 2017*
- Student Solidarity Rally *Spring 2017*
- EI Panel: Lady Liberty's Poor and Huddled Masses: *Rethinking Refugees in America* *Spring 2017*
- EI Panel: We Want You...Or Do We? *A Panel on Refugees & Asylees Coming to the U.S.* *Fall 2016*
- We Won't Stand for Hate at Gettysburg College *Fall 2016*
- Political Debates *Fall 2015/2016, Spring 2016*
- Hour of Code Colloquia *Fall 2015/2016*

Governance

Gettysburg Association for Computing Machinery (ACM) chapter

- Vice President *2016-2017*
- Secretary *2015-2016*
- Student Senate Representative *2015-2017*

Gettysburg College Independents

- Treasurer *2016-2017*
- Organized and moderated three political debates between the College Democrats and College Republicans.

Gettysburg Anti-Capitalist Collective (GACC)

- Political organization. Organized debates, events & rallies, distributed zines, and participated in campus activism projects. Club also served as a welcoming space for politically and socially marginalized LGBTQA+ students.
- Student Senate Representative *2016-2017*

References

Contact information for references available upon request.

Charles E. Rose	*Associate Technical Staff*	MIT Lincoln Laboratory
Dr. Todd W. Neller	*Professor*	Gettysburg College Computer Science Dept.
Dr. Lisa Portmess	*Bittinger Professor of Philosophy*	Gettysburg College Philosophy Dept.
Dr. Shirley Anne Warshaw	*Professor*	Gettysburg College Political Science Dept.
Dr. Charles W. Kann, III	*Adjunct Professor*	Johns Hopkins Whiting School of Engineering