# George "Quint" GUVERNATOR V

Amsterdam, the Netherlands https://quint.guvernator.net quint@guvernator.net

### EMPLOYMENT EXPERIENCE

 $January\ 2019\ -$ Senior Software & Language Engineer at Surfly in Amsterdam (NL) (ongoing)

Contributed to a co-browsing proxy server that parses and re-writes code on the fly. Tracked down browser and webserver bugs in implementations of web APIs. Wrote a zero-copy WebSocket proxy server. Proposed, built, and deployed internal tooling to unify development across multiple platforms and types of virtualization. Managed internationalization of all projects across fifteen languages.

API Engineer at Snagajob in Richmond, Virginia (USA) May 2017 -

November 2018 Built REST backend microservices for a work management and scheduling webapp. Worked in an Agile environment adding features according to user stories. Overhauled time zone, and notification behavior across several projects. Reimplemented a software prototype

from a local business for nationwide production scale.

Freelance Web Developer in Williamsburg, Virginia (USA) Spring 2015 -

Spring 2017 Designed, built, and maintained Ruby/Rails webapps and their databases. Evaluated and

reviewed research papers for implementation feasibility. Provided technical consultation

to local entrepreneurs.

Summer 2016 Researcher at the Software Engineering Maintenance and Evolution Research Unit at

William & Mary (USA)

Instrumented Android virtual machines with custom research code. Evaluated research

papers on Android software engineering. Built internal tooling for research use.

Summer 2013 & Summer 2015

Software & Computer Engineer at Valeo Service in Newport News, Virginia (USA) Designed and built internal software for a warehouse environment. Deployed new software

and systems. Maintained company servers. Provided technical support to employees.

Fall & Spring 2014 Software Development Intern at the Institute for the Theory and Practice of Interna-

tional Relations at William & Mary

Contributed to data visualization webapps to track international aid funding patterns. Manipulated and interpreted technical papers using machine learning algorithms. Developed text mining processes. Designed and maintained internal software.

### TECHNICAL SKILLS AND EXPERIENCE

- Proficient in Python (since 2008), C (since 2013), Javascript (since 2013), Go (since 2014), C<sup>#</sup> (since 2017), and Z80 assembly (since 2019). Comfortable with Rust, Haskell, Ruby, and Shell scripting. Some experience with C++, Lua, and other assembly dialects.
- Experienced working on both large and small teams, collaborating with a distributed git workflow.
- Proficient Linux systems programmer. Specific experience with systemd, early boot, and evdi.
- Proficient Web developer. Experience creating RESTful backends using Flask, Django, Rails, Node, and Rocket. Experience with PostgreSQL, MySQL, MariaDB, and MongoDB databases. Some frontend experience with Angular and Vue. Familiar with GraphQL.
- Active in the open-source software community; see quint.guvernator.net for projects.
- Deeply familiar with the internal workings of web APIs such as WebSockets, Web Workers, Canvas, and HTML5 audio.
- Experienced building, configuring, and maintaining GNU/Linux machines, both professionally and for fun, using various distributions. Experience with Docker, LXC/LXD, and systemd-nspawn.
- Comfortable reading/writing language grammars (EBNF/YACC).
- Executed a technical review of van Baarsen's GitLab Cookbook (Pact Publishing, Dec. 2014).
- Designed sound for short films, theatrical productions, and music side-projects in Ableton Live.

## **EDUCATION**

Fall 2013 - The College of William & Mary in Williamsburg, VA

Spring 2017 Majors in Computer Science and Linguistics

Research experience in computational linguistics and software engineering practices

Cumulative G.P.A. 3.7; Dean's List for 4 semesters

Fall 2015 Universiteit Leiden in Leiden, the Netherlands

Courses in Meta-Science, Linguistics, and Social Sciences

## ADMINISTRATIVE EXPERIENCE

• Member of Dutch hackerspaces RevSpace (Den Haag) and Technologica Incognita (Amsterdam).

- Board of Directors (2017–2018) at HackRVA, a makerspace in Richmond, VA.
- Board Member and User, Small Hall Makerspace in the William & Mary Physics department.

### COLLABORATIVE PROJECTS

- Built and programmed the electronic name badge for the 2018 RVAsec security conference using a PIC32MX MCU on a custom circuitboard. Implemented a two-channel wavetable audio synthesizer on the badge and a composition companion app for Linux, both in C. Helped coordinate the twentyperson project over nine months.
- Manufactured made-to-order custom mechanical keyboards for work colleagues using a laser cutter, 3D printer, and reverse-engineered bluetooth chips. Managed the ten-person project over two months.