

George “Quint” GUVERNATOR V
<http://quint.guvernator.net>
quint@guvernator.net¹

Mailing Address
P.O. Box XXXX
Richmond, VA 23221

Work Address
Snagajob
4851 Lake Brook Drive
Glen Allen, VA 23060

EDUCATION

*Fall 2013 –
Spring 2017* **The College of William & Mary** in Williamsburg, VA
Studying Linguistics and Computer Science
Cumulative G.P.A. 3.7; Dean’s List for 4 semesters

Fall 2015 **Universiteit Leiden** in Leiden, the Netherlands
Courses in Linguistics, Meta-Science, and Social Sciences

2006—2013 **Norfolk Academy** in Norfolk, VA
Advanced courses in French, German, Mathematics, and Music Theory
Graduated with Honors

EMPLOYMENT EXPERIENCE

*Summer 2017
(ongoing)* **API Engineer** at Snagajob in Richmond, VA
Built REST backend microservices for a progressive work management and scheduling webapp. Worked in an Agile environment adding features according to user stories. Overhauled time, time zone, and notification behavior across several projects. Reimplemented a geolocal project for national scale.

*Spring 2015 –
Spring 2017* **Freelance Web Developer** in Williamsburg, VA
Designed, built, and maintained Ruby on Rails webapps and their databases. Evaluated and reviewed research papers for implementation feasibility. Provided technical consultation to local entrepreneurs.

*Summer 2013 &
Summer 2015* **Software & Computer Engineering** at Valeo Service, USA in Newport News, VA
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 International Relations at William & Mary
Maintained Ruby on Rails websites. Manipulated and interpreted technical papers using machine learning algorithms. Developed text mining processes. Designed and maintained internal software.

RESEARCH EXPERIENCE

*Spring 2015
(ongoing)* **Sensation and Perception through Augmented-Reality Audio** with the Small Hall Makerspace and the Physics department at William & Mary
Building and analyzing a system for sensory substitution or augmentation using electrical sensors as an artificial organ, augmented-reality audio as a human-machine interface, and a microprocessor development board for signal-processing.

Summer 2014 **Learning Patterns of Mobile Interface Design** with the Department of Engineering and Sciences at the University of Colorado, Colorado Springs
Studying the effectiveness of machine learning techniques to analyze the quality of Android applications’ graphical design.

¹PGP Fingerprint: 65A6 6455 A2A5 CAC8 13E4 93FB FC13 890A 40FE EF7B

LINGUISTICS RESEARCH INTERESTS

- Computational linguistics research and development, especially related to cognitive science or computational cognitive modelling
- Theoretical work with perceptual biases and heuristics as manifest in idelect
- Language documentation, analysis, and preservation with an emphasis on community empowerment

COMPUTER SCIENCE RESEARCH INTERESTS

- Programming language development, especially concerning memory safety, thread safety, and strong typing
- Computational linguistics research and development, especially related to cognitive science or computational cognitive modelling
- Developing powerful, flexible tools for computer power users and researchers outside the Software Development community
- Design patterns within concurrent and functional programming

TECHNICAL SKILLS AND EXPERIENCE

- Proficient in Python (since 2008), C (since 2013), and C# (since 2017). Proficient Linux systems programmer. Comfortable with Rust, Haskell, Ruby, Go, Java (the JVM and Android), and Shell scripting. Familiar with C++, Lua, and MIPS assembly.
- Comfortable with Ruby/Rails, Javascript (including Node, Angular, JQuery), HTML, and CSS (and its derivatives).
- Proficient at designing RESTful web APIs. Familiar with and enthusiastic about GraphQL.
- Experienced at creating, managing, and working with PostgreSQL and MongoDB databases.
- Experienced building, configuring, and maintaining GNU/Linux machines, both professionally and for fun, using various distributions. An official Arch Linux pre-release package tester.
- Active in the open-source software community; see quint.guvernator.net for projects. Proficient with git and related tools.
- Comfortable reading and writing language grammars (EBNF/YACC and Field Linguistics alike).
- Executed a technical review of van Baarsen's *GitLab Cookbook* (Pact Publishing, Dec. 2014).
- Designed test-cases and adapted project specifications for *Data Structures* course at William & Mary.
- Copy edited for *The Flat Hat*, the William & Mary student newspaper.
- Hosted a show at and maintained the website of the *WCWM* student FM and internet radio station.
- Volunteered at and maintained the website of *The Meridian* student coffeehouse.
- Amateur Extra Class licensed in the United States; this is the most permissive license and grants all privileges on all US amateur bands.
- Designed sound for films, theatrical productions, and music side-projects in Ableton Live.
- Comfortable with \LaTeX and modern desktop office suites.

ADMINISTRATIVE EXPERIENCE

- Member Board of Directors, HackRVA, a makerspace in Richmond, VA.
- Former Board Member and User, Small Hall Makerspace in the William & Mary Physics department.
- Retired Member, Revspace, a hackerspace in Den Haag, Netherlands.

2018 HACKERSPACE PROJECTS

- Built and programmed the electronic name badge for the RVAsec security conference in Richmond, VA 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 this twenty-person project over nine months.
- Replaced the internals of a Casio calculator watch with a custom, hand-soldered MSP430-based board with 0201-sized surface mount components. Submitted patches in C and MSP430 assembly to the upstream maintainer.
- Manufactured made-to-order custom mechanical keyboards for work colleagues using a laser cutter, 3D printer, and reverse-engineered bluetooth chips. Managed this ten-person project over two months.
- Built a distributed thermostat on the ESP8266 platform using Lua, C, and the MQTT message bus.
- Composed 8-bit music on the Nintendo Gameboy using homebrew software synthesizers mGB & LSDj.
- Machine sewed a flag for the HackRVA makerspace.

REFERENCES

Jack Martin

Director of Linguistics
College of William & Mary
jbmart@wm.edu
+1 (757) 221-3906

Daniel Parker

Professor of Linguistics
College of William & Mary
dparker@wm.edu
+1 (757) 221-2952

Robert Michael Lewis

Chair, Department of
Computer Science
College of William & Mary
rmlewi@wm.edu
+1 (757) 221-2032