

George Hunter Bernard

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Education: Pratt School of Engineering, Duke University, Durham NC

- **GPA: 3.66** | Graduating Fall 2018
- B.S.Eng. in Electrical and Computer Engineering
- B.S. in Computer Science
- Minor in Mathematics
- Member of IEEE: Eta Kappa Nu Honor Society

Employment: **Data Engineering Intern** Tresata, Charlotte, NC, (6/2018 - 8/2018)

- Tuned, tested, and extended an open source "wordtophrase" NLP pre-processing algorithm in a Spark, Scala, command line only, remote AWS/EMR Hadoop Cluster
- Proactively communicated with remote team in scrum style daily correspondence
- Documented a 9 page summary white-paper to transfer problem domain knowledge

Software Engineer Co-Op. Northrop Grumman, King George, VA (1/2017 - 6/2017)

- Worked within large C++ and Lua codebase
- Contributed to large distributed simulation system for the Navy AEGIS platform
- Automated data entry processes and improved simulation weather realism

Software Design Course TA. Duke Computer Science Department, (8/2017-5/2018)

- Held code reviews and office hours for students' large team projects
- Taught Design Patterns, TDD, Git, SOLID Principles, and Intermediate Java

Digital Systems Course Operations TA, Duke ECE Department, (1/2018-5/2018)

- Managed logistics and operations for 16 member TA team
- Implemented comprehensive test cases in MIPS and Verilog design assignments

Climbing/Trip Supervisor, Duke Outdoor Adventures, (9/2015 - 12/2016)

- Managed wall safety, gear inventory, and participant engagement
- Handled logistics and safety for several kayaking and backpacking trips

Experience: **Academic Coursework:**

- Arduino fault injection experiments with homemade EMP generator
- "Casino-op" game implemented with 3000 lines of MIPS assembly for a self designed processor with memory mapped VGA screen on an Altera FPGA
- Topological analysis of Neural Network Design
- Write Once File System with FUSE in C/C++, one of 4 person team
- Java game creation platform, one of 10 person team
- *Most Creative Design* award in a Duke class Arduino robotics challenge for a metronome detector

Personal Interests:

- Functional programming paradigms
- Reading textbooks for fun
- Gear Director and Leader of backpacking trip for incoming Duke freshman

Skills:

Languages:

Scala, Java, C/C++, Python

Operating Systems:

GNU/Linux, Windows

Software Design:

Design Patterns, TDD, Dependency Injection, SOLID

Computer Engineering:

Verilog, MIPS, Digital Logic, Circuits

General Skills:

Command line, Bash, Git, Vim, LaTeX, Spark