Luke Horgan
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Education:
Northeastern University, Boston MA   Expected Graduation: May 2019
Bachelor of Science: Computer Science and Computer Engineering
GPA: 3.93/4.00

Coursework:
- Differential Equations/Calculus II
- Probability/Statistics
- Linear algebra
- Discrete mathematics
- Logic and Computation (ACL2)
- Algorithms
- Object Oriented Design
- Functional Design
- Digital Logic
- Circuits and Signals
- Physics II
- Electronics

Skills:
- Operating Systems: Windows, Debian, Ubuntu
- Real Languages: C/C++, Java, Python, Racket (≈ Scheme), ACL2, a dollop of English
- Web Stuff: JavaScript, PHP, Django (and, of course, HTML/CSS)
- Hardware: AC/DC circuit analysis, Simulink, Verilog
- Development Software: Eclipse, IntelliJ, PyCharm, Visual Studio, MATLAB
- Media Software: GIMP, Adobe PhotoShop, Sony Vegas
- Soft skills: Writing (technical or otherwise), Jargon translation, Friendly conversation

Work Experience:
Freelance Web Development: *April 2013-present*
- Develop and maintain personalization software for Elegant Baby using JavaScript/JQuery, CSS, and HTML5, as well as a bit of PHP

Lazer Science Lab, Research Assistant/Developer   *2014-present*
- Took over development of VolunteerScience.com
- Spearheaded Facebook integration to allow citizen scientists to "donate" personal data (Graph API)
- Ongoing maintenance of the site's game API to satisfy feature requests (JavaScript, DJANGO)
- Integration of new features into existing web-games and development of new ones

Kirusa, Technical Intern   *Summer 2014*
- Ported communication application InstaVoice for use on experimental hardware (Google Glass and Ford Sync AppLink)
- Provided support for Pebble development in C

PROTECT Center, Research Assistant   *Fall 2014*
- Developed software to parse USGS data for use by Northeastern researchers

Fun Projects:
- Explored recursion and alpha-beta pruning by writing a chess AI
- Designed a Scrabble AI which defeated all human opponents with whom it was faced
- Several Sudoku AIs, each one focusing increasingly on brevity and efficiency
- Computer vision decoding of artsy, custom "barcodes" (personal favorite)
- MIPS processor on FPGA in Verilog

Volunteer Experience:
Castle Square Tenants Organization: *2014-present*
- Tutor high/middle schoolers, play with elementary schoolers, and occasionally fix computer problems

Hobbies:
- Photo/video editing (with help from custom software; the marriage of CS and art)
- Getting lost in the woods, biking