NOEL NEGUSSE

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EDUCATION

The University of Texas at Austin   *Expected Graduation: May 2017*
Bachelor of Science in Computer Science   *GPA: 3.0*
Bachelor of Science in Mathematics

SKILLS

Languages   *C++/C . Python . Verilog . Java . JavaScript . Bash*
Tools/Libraries   *OpenGL . three.js . ncurses . JavaCC . nginx . ELK . CMake . Git . GDB*

WORK EXPERIENCE

Software Engineer Intern   *June 2016 to August 2016*
Vectra Networks, Inc.   *Python, C++, CMake, ELK, nginx, AWS*

- Built/Shipped an end-to-end pipeline to capture network traffic and extract metadata from deployments

- Implemented an ELK stack to visualize network traffic statistics to streamline protocol research

Server Administration Intern   *June 2014 to August 2014*
KidsCare Therapy Offices   *UN*X, Bash*

- Conducted white box penetration tests, optimized server workloads and orchestrated system migrations

Computer Science Research Intern   *January 2013 to May 2013*
The University of Texas at Dallas   *Java, C#*

- Wrote the monitor interface to a wearable sensor in collaboration with EE and CS graduate students

- Developed a dynamic testing utility using *Java* to vet the sensor's gyroscope and accelerometer

PROJECTS

Foids – Particle System   *December 2016*
http://noelnegusse.com/foids   *JavaScript, three.js*

- Programmed an interactive, 3D implementation of Boids using the WebGL and three.js libraries

Ray Tracer   *August 2016 to September 2016*
https://github.com/tunneln/ray-tracer   *C++, OpenGL*

- Developed a ray tracer implementing the Whitted-Illumination model, anti-aliasing, shading and more

Pipelined Processor   *September 2016 to October 2016*
https://github.com/tunneln/pipelined-processor   *Verilog*

- Implemented a 16-bit RISC pipelined processor with 2-bit branch prediction and instruction caching

Carnot Knowledge Engine   *November 2015 to May 2016*
https://github.com/tunneln/CarnotKE   *Java, JavaCC*

- Collaborated with Professor Philip Cannata to develop a *Multi Language Interface to Heterogeneous DB*

- Reimplemented a semantic DB over Oracle NoSQL and extended the query language for dynamic schemas

Virtual Memory Framework   *March 2015 to May 2015*
https://github.com/rellermeyer/course_os   *C*

- Constructed swapping system and page fault handler from the ground up for our made-from-scratch kernel

ASCII Invaders   *Feburary 2015*
https://github.com/tunneln/ascii-invaders   *C++, ncurses*

- Developed a simple remake of Space Invaders using the ncurses library and ASCII character sprites