

HANNAH ROSE ARNTSON

Education

Northwestern University, Evanston, IL

June 2016

Bachelor of Science in Computer Engineering

Certificate in Engineering Design, Segal Design Institute

GPA: 3.65 / 4.00

Relevant Coursework: Mechatronics, Microprocessor Design, Artificial Intelligence (Python), Robotics, Computer Architecture, FPGA Design and Analysis, Industrial Design Projects, System Software (x86 Assembly), Machine Learning

Experience

The Boeing Company, Kent, WA

Summer 2015

Engineering Intern

- Supported the P8 Poseidon Mission Computing and Display Systems team

Rehabilitation Institute of Chicago, Chicago, IL

Fall 2014-Summer 2015

Research Programmer

- Designed an interactive gaming system in Java for a virtual reality rehabilitation project. The system took in data from a motion-tracking camera to provide entertainment and constructive feedback to people undergoing stroke rehabilitation.

Neuroscience and Robotics Research Lab, Northwestern University, Evanston, IL

Winter 2015

Control Systems Team Lead

- Programmed a microcontroller in C to communicate wirelessly with a laptop, interpret commands and control a brachiating robot.
- Managed a diverse control team and maintained close communication with other teams to ensure that the project stayed on track.

Medtronic, Mounds View, MN

Summer 2014

Computer Engineering Summer Associate

- Developed new procedures for a Product Support team to detect, troubleshoot, and process transmission failures from the LINQ implantable heart monitor to the CareLink network, improving patient safety and reducing the team's overall workload.

Computer Enterprises, Grand Rapids, MN

Summer 2013

Intern

- Performed custom hardware and software computer builds for managed service clients.
 - Provided technical support for home and business computing systems while documenting my procedures for future training.
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Engineering Projects

Problem-Solving Autonomous Robot, Northwestern Robot Design Competition

Winter-Spring 2015

- Designed, built, and programmed an autonomous robot that utilized sensor input, planning, and localization strategies to race against other robots in a timed competition.
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Skills

Programming: C, C++, Python, Java, x86 assembly, ROS, VHDL, Matlab

Technical: Linux, computer hardware, microcontroller wiring, Vim, Emacs, Quartus II software, circuit test bench equipment

Languages: Proficient in reading, writing, and speaking Spanish

Leadership

BLAST, Northwestern Ballroom, Latin, and Swing Dance Team

President

Spring 2014 – Present

- Lead an executive board to manage BLAST's performances, classes, outreach, and social events and determine the potential for growth, mission, and future of the organization.
- Worked with Northwestern Student Government and the dance community to ensure the group's funding, status, and outreach.

Choreographer

Fall 2014 - Present

- Managed and directed casts to learn new choreography for performances, including an annual large-scale production.

Leadership Coaching, Center for Leadership at Northwestern University

Spring 2015

- Chosen to work with a Leadership Fellow to tailor leadership strategies to develop my personal communication and management style, resulting in improved leadership of the BLAST executive board and greater focus and direction in my work life.