

## EDUCATION

<b>Washington University</b> <ul style="list-style-type: none"><li>• M.S. in Computer Science</li></ul>	<b>Saint Louis, MO</b> GPA: 3.57/4.0	<b>August 2011-August 2014</b>
<b>Bard College</b> <ul style="list-style-type: none"><li>• B.A. in Computer Science</li><li>• Senior Project Thesis: <i>Delaunay Diagram Representations for Use in Image Near-Duplicate Detection</i></li></ul>	<b>Annandale-on-Hudson, NY</b> GPA: 3.59/4.0	<b>August 2007-May 2011</b>

## RELEVANT TECHNICAL SKILLS

Java, JavaScript, C/C++, HTML, CSS, Python

## WORK EXPERIENCE

**Software Engineer, Cerner Corporation** **September 2014-Present**  
**HEALTH MANAGEMENT DEV TEAM** [JavaScript, CSS, HTML, Knockout, MPages, CCL, Java, JUnit]

- Contributed to a REST service that allows the information supplied by my team to be consumed externally
  - The main purpose of the project is to allow integration with FHIR, which is the current standard for exchanging electronic health records
  - Used the team's immunizations local service to create a REST service that is easily translatable to the FHIR format and which can be accessed externally using an OAuth token
- Completed work on two components of a Mass Vaccination solution for streamlining the administration of vaccines:
  - *Mass Assign Vaccines MPage*: allows the vaccine administrator to mass assign vaccines to a patient list
  - *Medication Administration MPage*: launches Cerner's Medication Administration Wizard from within the page by either scanning a barcode identifying the patient or clicking the appropriate link
    - ✓ The work was part of Cerner's Department of Defense contract
    - ✓ Successfully completed and delivered the project components in a timely manner

**ORDERS AND PLANS DEVELOPMENT TEAM** [C++, CCL, Visual Studio]

- Training and unit tests for PowerOrders software, which helps medical professionals coordinate orders across facilities

**Research Intern, Mitsubishi Electric Research Laboratories** **May-August 2014**  
**SPATIAL ANALYSIS GROUP** [MATLAB, C++, OpenCV, Visual Studio]

- Worked on an indoor 3D reconstruction algorithm using images and 3D models

**Graduate Research Assistant, Washington University in Saint Louis** **August 2011-May 2014**  
**COMPUTER VISION GROUP** [MATLAB, C++, Python, HTML, CSS, Django, JavaScript, MySQL, Google Maps API]

- Contributed to and maintained *The Archive of Many Outdoor Scenes*: the largest archive of outdoor webcam imagery (more than half-billion images) *amos.cse.wustl.edu*
- Updated the interface design of *Project Live3D*: a web application which allows users to geo-calibrate webcams by marking image correspondences on a 3D Google Earth model *projectlive3d.com*
- Designed method to correct EXIF image timestamps using correspondences between shadows and shadow casters
- Created 3D models of trees using structure from motion and analyzed the challenges involved in doing so

**COMPUTER GRAPHICS GROUP** [C++]

- Improved existing bone segmentation tool by adding a filter to create binary volume from a CT scan

**Summer Research Intern, Clemson University** **May-August 2010**  
**VIRTUAL ENVIRONMENTS GROUP** [C++, OpenSceneGraph, Autodesk Maya]

- *Egocentric Distance Estimation in Virtual Environments* project: modeled a virtual environment to imitate a physical room and provided functionality so that objects would move identically in the room and in the virtual environment

**Student Programmer, Bard College****September 2010-May 2011****HENDERSON COMPUTER RESOURCES CENTER [PHP, MySQL, LDAP, SOAP]**

- Designed and started implementing a central online system for changing passwords on Bard's network

**Web Communication Intern, Human Rights First****January-May 2010****SEMESTER INTERNSHIP [HTML, CSS, PHP, WordPress]**

- Created templates and style sheets to transition the organization's website to the WordPress platform

**Summer Research Intern, University of Houston****Summers 2008, 2009****COMPUTATIONAL PHYSIOLOGY LAB [MATLAB]**

- In 2008, worked on the *Analysis of the Blood Perfusion and Perspiration Components of the Supraorbital Thermal Signature* project, in which I proposed and analyzed techniques to measure stress in thermal imaging videos
- In 2009, analyzed the effectiveness of the lab's stress analysis tool on real polygraph data, and showed that the technology was close to being usable in practice

**Research Assistant, Bard College****January 2008-December 2009****LABORATORY FOR ALGEBRAIC AND SYMBOLIC COMPUTATION [Wolfram Mathematica]**

- Worked on applications related to the classification of quandles

**LEADERSHIP AND TEAMWORK**

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**IDEA Labs Team Member, Washington University in Saint Louis****October 2013-August 2014**

- Member of IdealTap, a multidisciplinary team of students designing an innovative lumbar puncture chair
- Contributed to the design and creation of an in silica model of the chair as well as a to-scale, wooden prototype
- Applied for a provisional patent for the device in April 2014

**President of ECHO Student Company, Bucharest, Romania****September 2005-May 2007**

- Simulated a retail company as part of the Junior Achievement Europe Student Company program
- Developed a business plan and a marketing strategy and designed and produced an innovative product, HanRuc, an anorak that turns into a backpack (rucksack)
- Won first prize in the national competition (Romania)

**AWARDS**

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| • <i>Research Assistantship</i> : full tuition and stipend from Washington University                            | 2011-2014   |
| • <i>Distinguished Scientist Scholarship</i> : full-tuition scholarship for all 4 years of study at Bard College | 2007-2011   |
| • University of Houston REU Poster Competition Winner  | August 2008 |
| • CRA-W Graduate Cohort Workshop: scholarship recipient to attend the workshop                                   | 2013, 2014  |
| • Grace Hopper Celebration of Women in Computing: scholarship to attend conference                               | 2011, 2012  |
| • <i>Best Company of the Year</i> , JA-YE Europe Company of the Year Competition, Romania: for ECHO              | May 2006    |