# ADINA RALUCA STOICA

**EDUCATION** 

Washington University Saint Louis, MO August 2011-August 2014

• M.S. in Computer Science GPA: 3.57/4.0

Bard College Annandale-on-Hudson, NY August 2007-May 2011

• B.A. in Computer Science GPA: 3.59/4.0

• Senior Project Thesis: Delaunay Diagram Representations for Use in Image Near-Duplicate Detection

#### **S**KILLS

• Programming Languages: Java, JavaScript, C/C++, HTML, CSS, Python

• Language Skills: Romanian - Native, English - Fluent, French - Advanced, Spanish - Beginner

# **EXPERIENCE**

Software Engineer Cerner Corporation September 2014-Present

Health Management Dev Team

April 2015-Present

[Cerner Millennium, JavaScript, Knockout, CSS, HTML, MPages, CCL, Java, JUnit]

- Currently working on a FHIR (Fast Healthcare Interoperability Resources) RESTful API to allow the services offered by my team to be consumed by external teams
- Currently working on an automatic black-box testing framework for all of the team's code base
- Previously worked on Cerner's Department of Defense contract, on two components of a Mass Vaccination solution for streamlining the administration of vaccines
  - i. Mass Assign Vaccines MPage: allows the vaccine administrator to mass assign vaccines to a patient list
  - ii. Medication Administration MPage: launch Cerner's Medication Administration Wizard for a patient from within the page by either scanning a barcode identifying the patient or clicking the appropriate link
  - Projects were finished and delivered in a timely manner
  - No errors have been reported with my code after extensive testing by multiple teams

Orders and Plans Development Team [C++, CCL, Visual Studio]

November 2014-April 2015

Worked on PowerOrders software, which helps medical professionals coordinate orders across all facilities

Research Intern Mitsubishi Electric Research Laboratories May-August 2014

Summer Internship, Spatial Analysis [MATLAB, C++, OpenCV, Visual Studio]

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

**Computer Vision Group** 

**Graduate Research Assistant** 

Washington University August 2011-May 2014

December 2011-May 2014

[MATLAB, C++, Python, HTML, CSS, Django, JavaScript, MySQL, Google Maps API]

- Development and maintenance work on *The Archive of Many Outdoor Scenes*: the largest archive of outdoor webcam imagery (more than half-billion images) amos.cse.wustl.edu
- 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++]

August 2011-November 2011

• 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: 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

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

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

# **University of Houston**

Summers 2008, 2009

Computational Physiology Lab [MATLAB]

- 2008: proposed and analyzed techniques to measure stress in thermal imaging videos
  - project Analysis of the Blood Perfusion and Perspiration Components of the Supraorbital Thermal Signature
- 2009: analyzed the effectiveness of the lab's stress analysis tool on real polygraph data
  - in the final report I 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**

#### **IDEA Labs Team Member**

## **Washington University**

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, 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 national competition (Romania)

#### **A**WARDS

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