# ADINA RALUCA STOICA

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## EDUCATION

- M.S. in Computer Science (August 2014) | Washington University in St. Louis | GPA: 3.57
- B.A. in Computer Science (May 2011) | Bard College, NY | GPA: 3.59
  - Senior Project Thesis: *Delaunay Diagram Representations for Use in Image Near-Duplicate Detection*

## AWARDS

- **Research Assistantship**: full tuition and stipend from Washington University (2011-2016)
- **Distinguished Scientist Scholarship**: full-tuition scholarship from Bard College (2007-2011)

## WORK EXPERIENCE

**Software Engineer**, Cerner Corporation (September 2014-Present)

- **Health Maintenance Dev Team** (May 2015-Present)
  - Contributed to the front-end and business logic of the team's Recommendations solution
    - Helped integrate information between Cerner's Health Maintenance and Healthe Intent services, providing the user with a more seamless experience of retrieving cross-referenced, up-to-date information
    - Technologies used: MPages (JavaScript, Jasmine), CCL (database)
  - Contributed to the implementation of an immunizations REST service that is easily translatable to the current standard for exchanging electronic health records and can be consumed externally using an OAuth token
    - Technologies used: Java, Junit, SQL
  - Wrote JUnit tests for some of my team's services
  - 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
    - Project was completed and delivered in a timely manner, and was part of Cerner's DoD contract
    - Technologies used: MPages (JavaScript, Jasmine), WorklistFramework (Knockout), CCL (database)
- **Cerner DevCenter Mentor** (December 2016-Present)
  - Spending 2-4 hours a week mentoring, reviewing, and coaching new engineers
- **Orders and Plans Development Team** (December 2014-April 2015)
  - Went through a training project for the team and wrote unit tests for PowerOrders software (C++, CCL)
- **Cerner DevCenter Trainee** (August-December 2014)
  - Worked on a "HackFest" submission system in Java, JSP and PostgreSQL

## OTHER EXPERIENCE AND PERSONAL PROJECTS

**Ideal-Engine (CompareApp):** personal project using the Meteor framework, ReactJS and MongoDB

- The application allows the user to create a custom comparison of various options based on user-defined scores for user-defined criteria: ideal-engine.herokuapp.com

**Research Intern**, SPATIAL ANALYSIS GROUP, Mitsubishi Electric Research Laboratories (Summer 2014)

- Used C++, OpenCV and MATLAB to develop an indoor 3D reconstruction algorithm using images and 3D models

**Graduate Research Assistant**, Washington University in Saint Louis (2011-2014)

- **Computer Vision Group**
  - 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 (HTML, CSS, Python, Django, JavaScript)
  - Updated the interface of Project Live3D: a web application which allows users to geo-calibrate webcams by marking image correspondences on Google Earth: projectlive3d.com (HTML, CSS, Python, Django, JavaScript, MySQL)
  - Wrote method to correct EXIF image timestamps using correspondences between objects and shadows (MATLAB)
  - Created 3D models of trees using structure from motion and analyzed the challenges of it (C++, Bundler, MATLAB)
- **Computer Graphics Group**
  - Improved an existing bone segmentation tool by adding a filter to create binary volume from a CT scan (C++)

**Summer Research Intern**, Virtual Environments Group, Clemson University (Summer 2010)

- Worked on project *Egocentric Distance Estimation in Virtual Environments*
  - Modeled a virtual environment to imitate a physical room using Autodesk Maya
  - Implemented functionality using C++ and OpenSceneGraph that enabled movement of objects in the room to be reflected in the virtual environment

**Summer Research Intern**, University of Houston (Summers 2008, 2009)

- In 2008, I worked on project *Analysis of the Blood Perfusion and Perspiration Components of the Supraorbital Thermal Signature*, in which I proposed and analyzed techniques to measure stress in thermal imaging videos
- In 2009, I 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

## LEADERSHIP AND TEAMWORK

- **IdealTap team member**, IDEA Labs, Washington University (2013-2014):
  - In a multidisciplinary team of students, contributed to designing an innovative lumbar puncture chair:
    - Design and creation of an in silica model of the chair as well as a to-scale, wooden prototype
    - Provisional patent for the device (2014-2015)
- **President of ECHO**, Junior Achievement Europe Student Company program, Bucharest (2005-2007):
  - Simulated the operation of a retail company on the market:
    - 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, 2007)