

# Nicolas Dedual

Research Assistant at Columbia University

dedual@gmail.com

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## Summary

Software Engineer, Research Scientist and Entrepreneur with experience in computer graphics, mobile device development, signal and image processing.

Aside from my scientific and engineering endeavors, I also have experience with media production and creating content for different platforms.

## Specialties

Augmented reality, HCI, mobile device development, alternate user interfaces, film editing and screenwriting

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## Experience

### **Graduate Technical Intern at Intel Corporation**

June 2010 - Present (5 months)

Developing mobile device applications for internal use, currently focusing on iOS devices. Assisting in the deployment of context-aware services and in charge of a creating a proof-of-concept system that incorporates these services utilizing the MeeGo platform.

### **Research Assistant at Columbia University**

January 2010 - Present (10 months)

Working on Augmented Reality and Human Computer Interaction research. Specifically, investigating new methods and techniques that can assist and enhance user collaboration both in a physical and also in a virtual location.

### **Graduate Intern Technical at Intel Corporation**

May 2009 - August 2009 (4 months)

Collaborated in the redesign of the Intel Sales System by performing usability tests to ensure that it conforms to usability standards. Designed OpenThoughts, a prototype that seeks to incorporate data that maps relationships among files in order to elicit a memory response from users. Assisted the Visual Analytics team by providing insights in software design from a visualization and usability standpoint

### **Software Engineer at Antair Corporation**

May 2008 - August 2008 (4 months)

Responsible for the user experience of a commercial puzzle game. Utilized Playground SDK, among other C++ SDKs, to generate special effects and improve gameplay. Assisted in developing

graphics for game elements. Created a level editor to facilitate and streamline the development of said game. Improved company's flagship product, a Java ME-based spam filter software for the BlackBerry platform. Provided technical support for all company products.

### **Deputy Staging Location Manager in Philadelphia, PA at Obama for America**

2008 - 2008

Co-coordinated deployment of volunteers on Election Day 2008 so that we could canvass as much area in Philadelphia as possible. Handled voter intimidation and voter disenfranchisement claims and assisted in coordinating and managing phone banks within staging location

### **Research Assistant at University of Florida**

September 2007 - May 2008 (9 months)

Collaborated with faculty members in implementing recurrent neural network structures, in conjunction with established and novel nonlinear filters, for use in the identification of explosive material.

### **Teaching Assistant at University of Florida**

August 2006 - August 2007 (1 year 1 month)

Updated and redesigned laboratory manual and class curriculum for Introduction to Circuits laboratory course. Provided instructional and clerical support to professors. Taught course to 3 sections of electrical, mechanical and computer engineering students. Executed teaching modules of said laboratory, and provided assistance to students in circuit design, theoretical understanding of circuit components, and understanding real-world limitations to circuit design.

### **Research Assistant at Northeastern University**

May 2005 - May 2006 (1 year 1 month)

Collaborated in the project: "4D Visualization of 4D CT Scan Datasets", developed new modules based on the SCIRun Problem Solving Environment that characterize how much radiation dosage a patient's tumor receives, along with other programs that assist doctors in better characterizing tumors in a 3D environment. Mentored Research Experience for Undergraduates (REU) student who assisted in developing a 3D modeling program that controlled how 4D CT-Scan data was projected on a 3D environment.

### **Web Development Co-op at MIT Lincoln Laboratory**

June 2004 - April 2005 (11 months)

Maintained current intranet websites, assisted permanent web developers in creating websites, developed both web objects and websites, participated in meetings with clients to get website specifications; integrated link-verification software, along with other software, on the laboratory intranet.

## Education

### **Columbia University - Fu Foundation School of Engineering and Applied Science**

PhD, Computer Science, 2010 - 2013

**Activities and Societies:** Intel Fellow, National Consortium for Graduate Degrees for Minorities in Engineering and Science Fellow

### **Columbia University - Fu Foundation School of Engineering and Applied Science**

Master of Science, Computer Science, 2008 - 2009

### **University of Florida**

Master of Science, Electrical and Computer Engineering, 2006 - 2008

**Activities and Societies:** Computational NeuroEngineering Laboratory Member, Electrical and Computer Engineering Graduate Student Organization

### **Northeastern University**

Bachelor of Science, Computer Engineering, 2003 - 2006

**Activities and Societies:** Eta Kappa Nu Member, IEEE Member, Northeastern University Computer Architecture Research Group Member, Gordon Center for Subsurface Sensing and Imaging Center Undergraduate Researcher

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## Honors and Awards

Roland Guyer Porter Memorial Award, Who's Who Among College Students, National Dean's List

## Interests

Programming, Digital Photography, understanding new technology, playing percussion instruments, traveling, writing short stories and scripts, reading novels.

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[Contact Nicolas on LinkedIn](#)