

# Richard Bailey

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## Objective

Secure a full-time development position that requires creative solutions to hard problems. The ideal job involves learning new technologies and working closely with great teammates.

## Education

Georgia Institute of Technology, Atlanta, GA Expected May 2009  
*Masters of Science in Computer Science* Current GPA: 3.6  
*Areas of interest: Networking, Mobile Applications, HCI (CSCW)*

Georgia Institute of Technology, Atlanta, GA 2001—May 2006  
*Bachelor of Science in Computer Science, highest honors* Final GPA: 3.65

## Technical Exposure

Languages, Toolkits Java, C/C++, Perl, Bash, PHP, MySQL, C#, GTK+ (gtkmm)  
Platforms Windows, Linux, Android, iPhone, JavaME, "Web 2.0"

## Adventures in Industry and Academia

VMware, Inc Palo Alto, CA  
*MTS Intern—HostedUI* 5/2008—7/2008

- Managed project requirements and timeline including a formal revision, internal request for comments, and regular bi-monthly updates.
- Designed and implemented feature in a timely fashion using C++ and GTK+
- Worked with other teams to learn and utilize internal libraries
- Implemented a Nautilus extension to integrate my feature and VMware Workstation with common Linux desktop installs

Georgia Institute of Technology Atlanta, GA  
*Graduate Research Assistant—RNOG IMS Lab* 01/2008—Present

- Assisted with course design and content, occasional lectures
- Provided organizational and technical support for the IMS Research Competition
- Authored sample code for various mobile platforms and field student questions about handset development

Amazon.com Seattle, WA  
*Software Development Engineer—Community: Customer Reviews* 07/2006—07/2007

- Rapidly learned common Amazon substrate sufficient for diagnosis and remediation of complex failure cases in a 24x7 support role, often independent of senior teammates
- Designed and implemented proof of concept to increase customer interaction
- Maintained and extended Review's report generation framework reacting to rapidly changing requirements and a generally unstable operating environment
- Implemented portions of RTR5 (the service supporting Amazon's Reviews experience)

Proficient Systems (Acquired by LivePerson) Atlanta, GA  
*Software Engineer (co-op)* 05/2003 - 08/2005

- Developed core extensions to *ProficientSalesServer* to support "MultiEngagement"
- Created solution enabling the storage of trees in databases while keeping the structure dynamic and allowing custom ordering for multiple users
- Created tools to speed up log file manipulation resulting in faster bug identification

Georgia Institute of Technology Atlanta, GA  
*Teaching Assistant (Java, Object Oriented Programming)* 09/2002 - 12/2003

- Assisted in the design of course tests and projects to assess student progress
- Lead weekly recitations for approximately 30 students
- Made heavy use of Java reflection to automate assignment grading

## **Selected Projects**

μThoughts (MicroThoughts)

*Masters Project, "Phase 0" Startup—Advisor Ling Liu*

02/2008—Present

- μT is a system that supports storing, organizing, and retrieving personal notes from handheld device and incorporates temporal and spatial aids for search and recall
- Proof of concept prototypes have been created for Android and the iPhone
- We hold a provisional patent on the core μT concept

Pub/Sub notification system

*Coursework: CS6210, Advanced Operating Systems*

10/2008

- This was a central server that maintained streams being published and tracked parties interested in receiving updates
- The server parsed a limited subscription language and efficiently filtered events as they came from publishers forwarding only events relevant to the subscribers

User Mode Linux Device Driver

*Coursework: CS6210, Advanced Operating Systems*

09/2008

- Built a kernel module that acted as either a virtual webcam or one of many "clones" in a UML instance—the device produced data that was available on /dev/vcam
- Implemented limited ioctl support such that each guest could specify a scaling factor of the image as well as enable and disable the camera locally and the "host" device could change the image it would deliver to its clones

Prototyping Location Based Services

*Senior Research Project—Advisor W.Keith Edwards*

01/2007—05/2007

- 3<sup>rd</sup> place People's Choice award at Tech's Undergraduate Research Competition
- Created framework for rapidly prototyping Location Based Services
- Leveraged "Web 2.0" technologies and a novel communication framework

## **Interests, Activities, Sundry**

- I love building tools that simplify life (mine or others) such as libraries, visual editors, etc. Any good excuse to do so will be chased
- Historically I've been fairly involved in the arts (Improv Comedy, Piano, Choral performance) and hope to return to these in the near future
- I'm deeply interested in (but, sadly, have had only minimal success with) Gourmet Cooking, Photography, and Microcontroller Programming.
- I have a long list of projects I *really* want to work on—ask me about them!

**References available upon request.**