

# CLAYTON SHEPARD

23 SUNSET BLVD.  
HOUSTON, TX 77005

CWS@RICE.EDU  
505.480.6763

---

## EDUCATION

---

**Rice University** Spring 2008  
B.S. in Electrical Engineering - GPA: 3.77

**Albuquerque Academy** (<http://www.aa.edu>) Spring 2004  
Academic Oriented High School - GPA: 4.34

---

## RESEARCH INTERESTS

---

- Applications and Design of Mobile Systems
- Human-Computer Interaction
- Information Infrastructures
  - Multimedia Processing and Distribution
  - Decentralized Networking and Web Services

---

## PUBLICATIONS

---

**Clayton Shepard\***, Ahmad Rahmati\*, and Lin Zhong, "NoShake: Content Stabilization for Shaking Screens of Mobile Devices," to appear in IEEE Int. Conf. Pervasive Computing (PerCom), March 2009. (acceptance rate 17%)(\*equal contribution)

---

## PROFESSIONAL EXPERIENCE

---

**Rice University – Houston, TX**

**Research Assistant – ECE Dept. with Dr. Lin Zhong** Dec 2006 – Present  
Content Stabilization  
Multimedia Transcoding and Distribution  
Gesture Recognition  
Webmaster for Rice Efficient Computing Group and ELEC 424  
<http://recg.rice.edu>, <http://elec424.rice.edu>

**Course Assistant – ECE Dept. with Dr. Joseph Cavallaro** Dec 2007 – Apr 2008  
Assisted with the design and production of educational MSP430 boards  
Helped plan and execute lab sessions for ELEC 220

**Project Coordinator – IT Department** Dec 2005 – Mar 2006  
Supervising over 30 contract workers installing the new IT network (RiceNet2)

**Wireless Network Administrator – IT Department** Dec 2006 – Jun 2007  
Configuring and monitoring the new wireless network

**College Computing Associate – IT Department** Aug 2004 – May 2005  
Troubleshooting/Fixing Student Computers

**IT Help Desk Employee – IT Department** Aug 2005 – Dec 2006  
Providing technical assistance for Rice students, faculty and staff

**Motorola Research Labs – Schaumburg, IL**

**Visiting Researcher** May – Dec 2008  
Cross device advertising and advanced advertisement targeting

---

**Intern**

May – Aug 2007

TVlicious – Social TV Clipping and Bookmarking  
2 Patents Pending

**Quadra Health Institute – Albuquerque, NM (<http://www.quadrahealth.com/>)**  
**Executive Administrative Assistant/Intern**  
**Network Administrator/IT Coordinator**

---

**AWARDS**

- President's Honor Roll Rice University Fall 2006, Spring 2007, and Fall 2007
- Jones College Service Award
- Three time top five placer in UNM-PNM statewide math contest 2002-2004
- National Merit Finalist 2003
- AP Scholar Award 2004
- Five congressional nominations for service academies

---

**APPLICABLE SKILLS**

- **Web Page Design**
  - HTML, XHTML, XML, CSS, PHP, JavaScript, SQL, Google Web Toolkit, Drupal
- **Server Applications**
  - Apache, VNC, Terminal Services, IIS, FTP, SSH, Proxies, Firewalls, Windows Server, Active Directory, VPN, DNS, SSL, Tomcat, Jetty
- **Networking**
  - TCP/IP, DHCP, Routing, OSI Model, Wireless Protocols, Cisco WCS
- **Hardware Design/Programming**
  - SimuLink, CrossStudio, DesignWorks, TI MSP430, Verilog, ModelSim, Xilinx, Spartan 2E and 3, Soldering
- **Computer Hardware**
  - Extensive knowledge of computer hardware including building, networking, troubleshooting, and repairing
  - RAID, BIOS Hacking, Over-clocking (Both CPU and GPU), etc
- **Microsoft Certified Systems Administrator Courses (MCSA)**
  - A+, Net+, 2126, 2151, 2152
- **Other Programming languages**
  - C, Java (iBatis, JAXB, GWT, Restlets, Servlets, and more), Java Microedition (Programming Symbian/Blackberry phones), Some Objective C (iPhone), C# (Windows Mobile)
- **Foreign Languages**
  - 7 Years of Spanish and two immersion trips
- **Linux**
  - Ubuntu, Debian, Gentoo, Xorg, CLI, LVM, LUKS, Raid, Shell Scripting, Remote Administration, Server Applications, Kernel Compilation
- **Virtualization**
  - VirtualBox, KVM, and extensive knowledge of Xen

## TRANSCRIPT

<b>Course</b>	<b>Title</b>	<b>Grade</b>
<b>Fall 2004</b>		
ANTH 235	Nanotechnology Content and Context	Pass
CAAM 335	Matrix Analysis	A
CHEM 251	Honors Organic Chemistry	B+
ELEC 226	Embedded Microcontrollers	A
ELEC 241	Fundamentals of Electrical Engineering	A
ELEC 261	Introduction to Waves and Photonics	B
<b>Spring 2005</b>		
CHEM 215	Organic Chemistry Lab	B+
CHEM 252	Honors Organic Chemistry II	B
COMP 212	Intermediate Programming	A
ELEC 220	Fundamentals of Computer Engineering	A
ELEC 242	Fundamentals of Electrical Engineering II	A
ECON 211	Principles of Economics I	B
<b>Fall 2005</b>		
ELEC 301	Introduction to Signals and Systems	B+
ELEC 305	Introduction to Physical Electronics	A
ELEC 326	Digital Logic Design	B+
ELEC 331	Applied Probability	A+
LPAP 172	Fencing	A+
<b>Fall 2006</b>		
ELEC 424	Mobile and Embedded Systems	A
ELEC 493	Senior Design Seminar	B+
ELEC 425	Computer Systems Architecture	A
ARTV 225	Drawing	Pass
COMP 320	Introduction to Computer Systems	A
<b>Spring 2007</b>		
ELEC 327	Digital System Design	A+
ELEC 342	Electronic Circuits	B+
ELEC 391	Professional Issues in Electrical Engineering	A
ELEC 421	Operating Systems and Concurrent Programming	A
ELEC 494	Senior Design Lab	A
ENGL 321	Shakespeare	Pass
<b>Fall 2007</b>		
ACCO 305	Financial Accounting	A+
ECON 448	Corporate Finance	A
ELEC 522	Advanced VLSI Design	A
LPAP 100	Intro to Tennis	A
PHIL 303	The Theory of Knowledge	Pass
SPAN 305	Commercial Spanish I	A-
<b>Spring 2008</b>		
ELEC 490	Independent Research In Electrical Engineering	A+
		<b>GPA: 3.77</b> (138 Hours)