# Aman Parnami

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# Education

#### Georgia Institute of Technology, Atlanta, USA

- Ph.D. Computer Science (Human-Computer Interaction), (starting) August 2013
- M.S. Human-Computer Interaction, May 2013, GPA: 4.0
- Advised by Dr. Gregory D. Abowd and Dr. Ali Mazalek

## Indian Institute of Technology, Mumbai, India

• B.Tech & M.Tech. Computer Science, 2008

# Fields of Research Interest

Mobile and Ubiquitous Computing, Sensors, Natural User Interfaces, Tangible User Interfaces

# **Research** Experience

VersTang: Changeable Tangibles, Advisor: Dr. Ali Mazalek, January-May 2013

• Fabricated dynamic tangibles that change identity, sense context of use, and provide appropriate feedback on runtime.

#### ARubi, Advisor: Dr. Gregory D. Abowd, Dr. Thad Starner, January-April 2013

• Conceptualized and created a tool to facilitate programming of environments through the lens of an augmented reality interface.

#### Activity Recognition In-The-Wild, Advisor: Dr. Gregory D. Abowd, November 2012-present

• Assisted with the work on inferring eating activity from first person point-of-view images and sensor data collected on a wearable device.

#### BackTap, Advisor: Dr. Gregory D. Abowd, May 2012-March 2013

- Developed novel interactions on the back case of a smartphone with the existing sensors on the device.
- Conducted evaluation with 24 participants.
- Submitted poster to UIST 2013.

Tangible Anchoring, Advisor: Dr. Ali Mazalek, August 2011-present

- Designed tangible interactions, information visualizations, and scenarios for this novel approach of news broadcast through a tabletop.
- Conducting an user evaluation.

#### Vibrodirection, Advisor: Dr. Jenny Singleton, January–June 2012.

- Conceptualized a wearable system (belt) that provides a vibro-tactile feedback indicating direction and a facility to log experiments through accompanying Android app.
- Developed system is being used by a deaf experimenter in a study gaze tracking of infants.

#### SciSketch, Advisor: Dr. Ali Mazalek, January-April 2012

• Contributed to the web-based front-end and prototyping of IR pens for a tabletop tool for sketch-based problem-driven collaborative learning.

Building Vision Based Applications of ProCams, Advisor: Dr. Sharat Chandran, 2007–2008

- Developed a 3D shooting range simulator for soldiers using an off-the-shelf web camera and a projector.
- Examined the use of off-the-shelf cameras to replace the specialized hardware for automating correction of a projection on a non-ideal surface.

#### Energy Conservation For Adults, Advisor: Dr. James D. Foley, January-April 2012

• Administered surveys that informed designs of three prototypes of ambient displays which were then tested with a sample of target population.

## Peer Reviewed Articles

Edison Thomaz, **Aman Parnami**, Jonathan Bidwell, Irfan Essa, Gregory D. Abowd. *Technological Approaches for Addressing Privacy Concerns When Recognizing Eating Behaviors with Wearable Cameras.* Ubicomp '13: Proceedings of the 15th international conference on Ubiquitous Computing.

Nithya Manickam, **Aman Parnami**, and Sharat Chandran (2006). *Reducing false positives in video shot detection using learning techniques.* In Proceedings of the 5th Indian conference on Computer Vision, Graphics and Image Processing (ICVGIP'06), Springer-Verlag, Berlin, Heidelberg, 421-432.

# Awards, Honors & Scholarships

Completion Certificate, Google Summer of Code, Google, 2008

Winner, Google Product Prodigy Contest, Google, 2008

Third place, Lord of the Code, RedHat Scholarships, 2007 & 2008

Institute Sports Special Mention, Athletics, Indian Institute of Technology, 2004

## Professional Experience

#### Interaction Design Intern, Mobile and Communications Group, Intel, May 2013–present

• Survey existing interactions and gestures on mobile devices and devise new ones along with an analysis of impact on platform architecture.

Research Assistant, Georgia Institute of Technology, August 2011–May 2013

- Enable new interactions using embedded and environmental sensors.
- Build applications for mobile devices and interactive tabletops.

Interaction Designer, Self Employed, November 2010–June 2011

- Architected a Customer Relationship Management tool for the sales team of a startup.
- Advised design and development teams remotely of another startup in Michigan.

#### Usability Consultant, Standard Chartered Bank, August 2008–July 2010

- Initiated user-centered design process in the development of financial applications for web and mobile.
- Guided visual designers, prototypers and developers.

Research Assistant, Indian Institute of Technology, May 2007–July 2008

• Worked on an Indian army sponsored project to develop a 3D shooting range simulator.

#### Teaching Assistant, Indian Institute of Technology, Summer 2006

• Assisted students and graded assignments for the introduction to object oriented programming course.

# Skills

Data Gathering: Contextual Inquiry, Focus Groups, Persona, Scenarios

Evaluation: Cognitive Walkthrough, Heuristic Analysis, Think Aloud, Interviews

Prototyping: Adobe Creative Suite, Sketching, Powerpoint, Balsamiq, Axure

Development: Visual Studio, Eclipse, XCode

Languages: HTML5, CSS, Javascript, PhP, Java, Python, Processing, C#

Mobile: Android

Hardware: Arduino, ZigBee, 3D Modeling, Laser Cutting, Shop Tools, Circuit Mill

## Service

Student Volunteer, CHI, 2012

- Institute Student Mentor, Indian Institute of Technology, Mumbai, 2006–2007
- Mentored 30+ freshmen, giving counsel and helping them adjust smoothly to campus life and make the best of their first year.

Presentation: Wireframing tools, Intro. to HCI course, February 2012

Workshop: Arduino for beginners, Aware Home Seminar, February 2012

Workshop: HTML and CSS, Teach and Learn HCI Seminar, September 2012

## Other Activities

Cross Country Running, Silver Medalist, 2004–2005

- Two times silver medalist in 5K racing events at Inter IIT Sports Meet.
- Recognized for consistently securing top two positions in inter-hostel athletic events.

#### Dance

- Trained in Bharatnatyam, Indo-Jazz, and Hip Hop to an intermediate level.
- Selected by a Bollywood choreographer amongst top 100/1500+ students training at his institute.

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