

MAYANK GOEL

My research focuses on developing new, practical, and deployable sensing and machine learning solutions. I largely focus on building systems to solve hard problems in health sensing, technologies, for the developing world, and novel user interaction, with an eye toward reducing deployment barriers. Specifically, I focus on extending the capabilities of on-board sensors on consumer devices like mobile phones, tablets, and smartwatches. To develop these sensing solutions, I draw on my diverse set of skills, including human-computer interaction (HCI), mobile computing, sensing, signal processing, and machine learning. My research is inherently interdisciplinary, and I regularly collaborate with mechanical, electrical, and biomedical engineers as well as doctors, nurses, and community health workers around the world.

Assistant Professor

Institute of Software Research and
Human-Computer Interaction Institute
School of Computer Science
Carnegie Mellon University
Pittsburgh, PA

WEBSITE

www.mayankgoel.com

LAB WEBSITE

www.smashlab.io

EMAIL

mayank@cs.cmu.edu

EDUCATION

Ph.D. 2011 - 2016	Computer Science and Engineering, University of Washington Advisors: Shwetak Patel and Gaetano Borriello Thesis: Extending the capabilities of smartphone sensors for applications in interaction and health
M.S. 2007 - 2009	Computer Science, Georgia Institute of Technology Advisors: Gregory Abowd Area: Mobile and Ubiquitous Computing
B.Tech. 2003-2007	Computer Science and Engineering, GGSIP University, India Institute: Maharaja Agrasen Institute of Technology

HONORS & AWARDS

2020	Google Faculty Research Award
2019	Best Paper Runner-up in IEEE Pervasive 2019 for [P26] Honorable Mention Award at UIST 2019 for MeCap [P32] & at CHI 2019 for Interferi [P29]
2016	Best Paper Nominee at CHI 2016 for SpiroCall [P17] Nominet Trust 100 (NT100) for SpiroCall [P7]
2015	Best Paper Nominee at UbiComp 2015 for HyperCam [P16] & at CHI 2015 for Tongue-in-Cheek [P13] Best Paper Runner-up at PerCom 2015 for WiBreathe [P12]
2014	Microsoft Research PhD Fellowship Best Paper Nominee at UbiComp 2014 for BiliCam [P11] Runner Up Research Prize from Madrona Ventures for WiBreathe
2013	Finalist in Global Social Entrepreneurship Competition for SpiroSmart
2012	Best Paper Nominee at UbiComp 2012 for SpiroSmart [P4] & at CHI 2012 for WalkType [P3]
2011	Donald C. Whitworth Fellowship Top Research Prize from Madrona Ventures for SpiroSmart

PROFESSIONAL EXPERIENCE

- 2016 - Present Carnegie Mellon University, Pittsburgh, PA
Assistant Professor
Lead the Smash Lab, School of Computer Science.
- Summer 2013 Microsoft Research, Computational User Experiences Group, Redmond, WA
Research Intern. Advisor: Scott Saponas, Neel Joshi, Dan Morris
Researched and designed prototypes for end-user hyperspectral imaging.
- Summer 2012 Samsung Research America, San Jose, CA
Research Intern. Advisor: James Bo Begole, Stacie Hibino
Researched various multi-device interaction techniques.
- 2009 - 2011 Futuristek Compusoft Pvt. Ltd., New Delhi, India
Co-Founder and Research Scientist
Co-founded the start-up specializing in mobile computing. Focused on using a phone's on-device sensors to assist user in their daily tasks, such as driving.

PEER-REVIEWED CONFERENCE & JOURNAL PUBLICATIONS

- P41 *Vid2Doppler: Synthesizing Doppler Radar Data from Videos for Training Privacy-Preserving Activity Recognition*
Karan Ahuja, Yue Jiang, **Mayank Goel**, Chris Harrison
CHI 2021.
- P40 *Pose-on-the-Go: Approximating Partial User Pose with Smartphone Sensor Fusion and Inverse Kinematics*
Karan Ahuja, Sven Mayer, **Mayank Goel**, Chris Harrison
CHI 2021.
- P39 *PrivacyMic: Utilizing Inaudible Frequencies for Privacy & Preserving Daily Activity Recognition.*
★ Yasha Irvantchi, Karan Ahuja, **Mayank Goel**, Chris Harrison, Alanson Sample
CHI 2021. **Honorable Mention Award (Top 5%)**
- P38 *Detecting Depression and Predicting its Onset Using Longitudinal Symptoms Captured by Passive Sensing: A Machine Learning Approach With Robust Feature Selection*
Prerna Chikersal, Afsaneh Doryab, Michael Tumminia, Daniella Villalba, Janine Dutcher, Xinwen Liu, Sheldon Cohen, Kasey Creswell, Jennifer Mankoff, J. David Creswell, **Mayank Goel**, Anind Dey
ACM Transactions on Computer-Human Interaction (TOCHI), 2020.
- P37 *BodySLAM: Opportunistic User Digitization in Multi-User AR/VR Experiences*
Karan Ahuja, **Mayank Goel**, Chris Harrison
SUI 2020.
- P36 *Direction-of-Voice (DoV): Estimation for Intuitive Speech Interaction with Smart Devices Ecosystems*
Karan Ahuja, Andy Kong, **Mayank Goel**, Chris Harrison
UIST 2020.
- P35 *FitByte: Automatic Diet Monitoring in Unconstrained Situations Using Multimodal Sensing On Eyeglasses*
Abdelkarem Bedri, Diana Li, Rushil Khurana, Kunal Bhuwarka, **Mayank Goel**
CHI 2020.

- P34 *Eyes on the Road: Detecting Phone Usage by Drivers Using On-Device Cameras*
Rushil Khurana, **Mayank Goel**
CHI 2020.
- P33 *Digital Ventriloquism: Giving Voice to Everyday Objects*
Yasha Iravantchi, **Mayank Goel**, Chris Harrison
CHI 2020.
- P32 *MeCap: Whole-Body Digitization for Low-Cost VR/AR Headsets*
★ Karan Ahuja, Chris Harrison, **Mayank Goel**, Robert Xiao
UIST 2019. **Honorable Mention Award (Top 5%)**
- P31 *Light Anchors: Appropriating Point Lights for Spatially-Anchored Augmented Reality Interfaces*
Karan Ahuja, Sujeath Pareddy, Robert Xiao, **Mayank Goel**, Chris Harrison
UIST 2019.
- P30 *Detachable Smartwatch: More than a wearable*
Rushil Khurana, **Mayank Goel**, Kent Lyons
UBICOMP (IMWUT) 2019.
- P29 *Interferi: Gesture Sensing using On-Body Acoustic Interferometry*
★ Yasha Iravantchi, Yang Zhang, Evi Bernitsas, **Mayank Goel**, Chris Harrison
CHI 2019. **Honorable Mention Award (Top 5%)**
- P28 *BeamBand: Hand Gesture Sensing with Ultrasonic Beamforming*
Yasha Iravantchi, **Mayank Goel**, Chris Harrison
CHI 2019.
- P27 *GymCam: Detecting, recognizing, and tracking simultaneous exercises in unconstrained scenes*
Rushil Khurana, Karan Ahuja, Zac Yu, Jennifer Mankoff, Chris Harrison, **Mayank Goel**
UBICOMP (IMWUT) 2019.
- P26 *Challenges in Realizing Smartphone-based Health Sensing*
★ Alex Mariakakis, Edward J. Wang, Shwetak Patel, **Mayank Goel**
IEEE Pervasive Computing 2019. **Best Paper Runner-up Award**
- P25 *RainCheck: Overcoming Capacitive Interference Caused by Rainwater on Smartphones*
Ying-Chao Tung, **Mayank Goel**, Isaac Zinda, Jacob O. Wobbrock
ICMI 2018.
- P24 *Ubicoustics: Plug-and-Play Acoustic Activity Recognition*
Gierad Laput, Karan Ahuja, **Mayank Goel**, Chris Harrison
UIST 2018.
- P23 *EyeSpyVR: Interactive Eye Sensing Using Off-The-Shelf, Smartphone-based VR Headsets*
Karan Ahuja, Rahul Islam, Varun Parashar, Kuntal Dey, Chris Harrison, **Mayank Goel**
UBICOMP (IMWUT) 2018.
- P22 *Use of Smartphone App to Assess Neonatal Jaundice*
James A. Taylor, James W. Stout, Lilian de Greef, **Mayank Goel**, Shwetak Patel, Esther K. Chung,
Aruna Koduri, Shawn McMahan, Jane Dickerson, Elizabeth A. Simpson, Eric Larson
Pediatrics August 2017.
- P21 *Carpacio: Repurposing Capacitive Sensors to Distinguish Driver and Passenger Touches on In-Vehicle Screens*
Edward Wang, Jake Garrison, Eric Whitmire, **Mayank Goel**, Shwetak Patel
UIST 2017.
- P20 *DigiTouch: Reconfigurable Thumb-to-Finger Input and Text Entry on Head Mounted Displays*
Eric Whitmire, Mohit Jain, Divye Jain, Gregory Nelson, Ravi Karkar, Shwetak Patel, **Mayank Goel**
UBICOMP (IMWUT) 2017.

- P19 *EarBit: Using Wearable Sensors to Detect Eating Episodes in Unconstrained Environments*
Abdelkareem Bedri, Richard Li, Malcolm Haynes, Raj Prateek Kosaraju, Ishaan Grover, Temiloluwa Prioleau, Min Yan Beh, **Mayank Goel**, Thad Starner, Gregory Abowd
UBICOMP (IMWUT) 2017.
- P18 *Design and learnability of vortex whistles for managing chronic lung function via smartphones*
Spencer Kaiser, Ashley Parks, Patrick Leopard, Charlie Albright, Jake Carlon, **Mayank Goel**, Damoun Nassehi, Eric C. Larson.
UBICOMP 2016.
- P17 *SpiroCall: Measuring Lung Function over a Phone Call*
★ **Mayank Goel**, Elliot Saba, Maia Stiber, Eric Whitmire, Josh Fromm, Eric Larson, Gaetano Borriello, Shwetak Patel
CHI 2016. **Best Paper Nominee (Top 5%)**
- P16 *HyperCam: Hyperspectral Imaging for Ubiquitous Computing Applications*
★ **Mayank Goel**, Eric Whitmire, Alex Mariakakis, Scott Saponas, Neel Joshi, Dan Morris, Brian Guenter, Marcel Gavrilu, Gaetano Borriello, Shwetak Patel
UBICOMP 2015. **Best Paper Nominee (Top 5%)**
- P15 *MagnifiSense: Inferring Device Interaction using Wrist-Worn Passive Magneto-Inductive Sensors*
Edward Wang, Tien-Jui Lee, Alex Mariakakis, **Mayank Goel**, Sidhant Gupta, Shwetak Patel
UBICOMP 2015.
- P14 *SwitchBack: Using Focus & Saccade Tracking to Guide Users' Attention for Mobile Task Resumption*
Alex Mariakakis, **Mayank Goel**, Tanvir Aumi, Shwetak Patel, Jacob Wobbrock
CHI 2015 (Acceptance Rate: 23%)
- P13 *Tongue-in-Cheek: Using Wireless Signals to Enable Non-Intrusive and Flexible Facial Gestures*
★ **Mayank Goel**, Chen Zhao, Ruth Ravichandran, Shwetak Patel
CHI 2015 (Acceptance Rate: 23%). **Best Paper Nominee (Top 5%)**
- P12 *WiBreathe: Estimating Respiration Rate using Wireless Signals in Natural Settings in Home*
★ Ruth Ravichandran, Elliot Saba, Keyu Chen, **Mayank Goel**, Sidhant Gupta, Shwetak Patel
IEEE PerCom 2015. **Best Paper Runner Up Award**
- P11 *BiliCam: Using Mobile Phones to Monitor Newborn Jaundice*
★ Lilian deGreef, **Mayank Goel**, Min Joon Seo, Eric Larson, James Stout, James Taylor, Shwetak Patel
UBICOMP 2014. **Best Paper Nominee (Top 5%)**
- P10 *AirLink: Sharing Files Between Multiple Devices using In-Air Gestures*
Keyu Chen, Daniel Ashbrook, **Mayank Goel**, Sung-Hyuck Lee, Shwetak Patel
UBICOMP 2014.
- P9 *SurfaceLink: Using Inertial and Acoustic Sensing to Enable Multi-Device Interaction on a Surface*
★ **Mayank Goel**, Brendan Lee, Tanvir Aumi, Shwetak Patel, Gaetano Borriello, Stacie Hibino, James Begole
CHI 2014.
- P8 *DopLink: Using the Doppler Effect for Multi-Device Interaction*
Tanvir Aumi, Sidhant Gupta, **Mayank Goel**, Eric Larson, Shwetak Patel
UBICOMP 2013.
- P7 *ContextType: Using Hand Posture Information to Improve Mobile Touch Screen Text Entry*
★ **Mayank Goel**, Alex Jansen, Travis Mandel, Shwetak Patel, Jacob Wobbrock
CHI 2013.

- P6 *Tracking Lung Function on any Phone*
Mayank Goel, Eric Larson, Morgan Redfield, Gaetano Borriello, Margaret Rosenfeld, Shwetak Patel
 DEV 2013.
- P5 *GripSense: Using Built-In Sensors to Detect Hand Posture and Pressure on Commodity Mobile Phones*
Mayank Goel, Jacob Wobbrock, Shwetak Patel
 UIST 2012.
- P4 *SpiroSmart: Using a Microphone to Measure Lung Function on a Mobile Phone*
 ☆ **Mayank Goel**, Eric Larson, Gaetano Borriello, Sonya Heltshe, Magaret Rosenfeld, Shwetak Patel
 UBICOMP 2012. **Best Paper Nominee (Top 5%)**
- P3 *WalkType: Using Accelerometer Data to Accommodate Situational Impairments in Mobile Touch Screen Text Entry*
 ☆ **Mayank Goel**, Leah Findlater, Jacob Wobbrock
 CHI 2012. **Best Paper Nominee (Top 5%)**
- P2 *Open Data Kit Sensors: A Sensor Integration Framework for Android at the Application Level*
 Waylon Brunette, Rita Sodt, Rohit Chaudhri, **Mayank Goel**, Michael Falcone, Jayden VanOrden, Gaetano Borriello
 MOBISYS 2012.
- P1 *Open Data Kit Sensors: Application-level Sensor Drivers for Android*
 Rohit Chaudhri, Waylon Brunette, **Mayank Goel**, Rita Sodt, Michael Falcone, Jayden VanOrden, Gaetano Borriello
 DEV 2012.

BOOK CHAPTERS

- C1. *Pulmonary Monitoring Using Smartphones*
 Eric Larson, Elliot Saba, Spencer Kaiser, **Mayank Goel**, Shwetak Patel
 Book: *Mobile Health* (Springer) 2017

ADVISING AND MENTORING

- | | |
|---------------------|--|
| Ph.D.
Students | <p>Julian Ramos (Spring 2019 - Present)
 <i>Co-advised with Anind Dey (UW)</i></p> <p>Rushil Khurana (Fall 2016 - Present)</p> <p>Abdelkareem Bedri (Fall 2016 - Present)</p> <p>Prerna Chikersal (Fall 2017 - Present)
 <i>Co-advised with Anind Dey (UW)</i></p> <p>Karan Ahuja (Fall 2017 - Present)
 <i>Co-advised with Chris Harrison</i></p> |
| Masters
Students | Rishabh Bhardwaj, Samadrita Das, Min Yan Beh, Pierre Amelot, Neeraj Talukdar, Priyanka Raja |
| Undergrad. | <p>CMU: Don Lee, Jett Hayes, Carolyn Zhong, Diana Li, Trisha Dwivedi, Disha Das, Christine Wu, Phoebe Song, Nelson Wong, Vivek Shankar</p> <p>University of Pittsburgh: Katelyn Morrison, Vasco Xu, Zac Yu</p> <p>University of Washington: Aishwarya Mandyam, Molly Moen, Rushabh Mehta, Brendan Lee, Patrick Larson, Cameron Pickett, Michale Falcone, Jaylen VanOrden</p> <p>Other: Dhruv Verma (IIIT Delhi), Sejal Bhalla (IIIT Delhi), Shreyasvi Natraj</p> |

High School Andrew Liu (after High School: UC Berkeley)
Sanjay Seshan (after High School: MIT)
Yuchen Liang (after High School: CMU)
Neha Nagvekar (after High School: University of Washington)
Maia Stiber (after High School: CalTech)
Isaac Zinda (after High School: Harvey Mudd)
Udit Ranasaria (after High School: CMU)
Alka Pai (after High School: Brown University)
Lukas Joswiak (after High School: University of Washington)

TEACHING EXPERIENCE

- CMU 17-428/728 (Fall 2019). Machine Learning and Sensing
FCE Scores (out of 5): Overall Course: 4.6, Overall Teaching: 4.7, Importance of Subject: 4.8, Explanation of Subject: 4.6
- 08-530/736 (Fall 2017). Pervasive and Ubiquitous Computing
FCE Scores (out of 5): Overall Course: 5.0, Overall Teaching: 4.9, Importance of Subject: 5, Explanation of Subject: 4.9
- 08-421/735 & 17-722/422 (Spring 2017-2020). Building User-Focused Sensing Systems
Average FCE Scores (out of 5): Overall Course: 4.3, Overall Teaching: 4.5, Importance of Subject: 4.6, Explanation of Subject: 4.6
- UW UW EE 590 (Fall 2015). Advanced Topics in Digital Computers: Ubiquitous Computing
IAS Scores (out of 5): Course as a whole: 4.7, Instructor's contribution: 4.8, Teaching effectiveness: 4.8, Instructor's enthusiasm: 5.0
- UW CSE 590P (Spring 2015). Advanced Topics in Ubiquitous Computing PMP
(Co-instructed with Shwetak Patel)
Top-rated class in the College of Engineering
IAS Scores (out of 5): Course as a whole: 4.8, Instructor's contribution: 4.8, Teaching effectiveness: 4.7, Instructor's enthusiasm: 5.0

SELECTED INVITED TALKS

- T16. An Ecosystem of Smart Devices for Opportunistic and Continuous Health Sensing
Apple Inc. February 2021.
- T15. An Ecosystem of Smart Devices for Opportunistic and Continuous Health Sensing
CMU Qatar. November 2020.
- T14. An Ecosystem of Smart Devices for Opportunistic and Continuous Health Sensing
Dartmouth College. October 2020.
- T13. Smarter Smartwatch for Health
Medical Wearables, San Jose. May 2019.
- T12. Teaching Old Sensors New Tricks
Georgia Institute of Technology, Atlanta. March 2018.
- T11. Teaching Old Sensors New Tricks
CMU Think, Florida, March 2018.
- T10. Teaching Old Sensors New Tricks
Disney Research, Pittsburgh. April 2017.
- T9. Making Devices Smarter and More Useful
Girls Who Code. Expedia, Seattle. August 2015.
- T8. Making Devices Smarter and More Useful
Girls Who Code. AT&T, Seattle. August 2015.
- T7. A Billion Medical Devices
TEDx UofW. Seattle. May 2015.

- T6. Where is My Water Going?
AIA Seattle Water Forum. May 2014.
- T5. SurfaceLink: Enabling Multi-Device Interaction on Mobile Devices
UW Computer Science and Engineering Industrial Affiliates. October 2013.
- T4. Tracking Lung Function on Mobile Phones
Change Seminar, University of Washington. March 2013.
- T3. Sensing and Accommodating for Situational Impairments on Mobile Devices
DUB Seminar, University of Washington. February 2013.
- T2. GripSense: Using Built-In Sensors to Detect Hand Posture and Pressure on Mobile Phones.
UW Computer Science and Engineering Industrial Affiliates. October 2012.
- T1. An Overview of Research in UW UbiComp Lab
Disney Research, Pittsburgh. September 2012.

SERVICE

Ph.D. Thesis Committee	Saiganesh Swaminathan (HCII, CMU) Jingyang Liu (School of Architecture, CMU) Siyan Zhao (HCII, CMU) Fannie Liu (HCII, CMU)
Editorial Board	IMWUT 2017-2022
Program Committees	MobiSys 2021 CHI 2017, 2018, 2021, 2022 UIST 2019-21 MobiCom 2019, 2020 COMPASS 2019 IUI 2018 UbiComp 2016
Organizing Committees	Gadgets Chair, UbiComp 2017 Workshops and Tutorials Chair, UbiComp 2019
Outreach	Shadyside Academy, Pittsburgh 2018-2021. Summer internship advisor. Winchester Thurston, Pittsburgh Final Projects 2020. Project Advisor. Girls Who Code Summer Program 2015. Guest Speaker. UW UbiComp Lab Internship 2013-2015. Program Coordinator. UW CSE Open House. 2012-2015. Volunteer UW College of Engineering Discovery Days 2013-2015. Volunteer
Tutorials/ Training	<i>Bridging the Gap: Machine Learning for UbiComp</i> Mayank Goel , Nils Hammerla, Thomas Ploetz, Anind K. Dey UbiComp 2015. <i>Mobile Application Development in J2ME</i> University of Ghana, Legon, Ghana. Summer 2008.

PATENTS

- Granted Device communication system with proximity synchronization mechanism and method of operation thereof.
Mayank Goel, Stacie Hibino
US 9179243 B2 / EP3079440A1, US 20150163618
- Pending Electronic system with surface detection mechanism and method of operation thereof
Mayank Goel, Stacie Hibino, James Begole
PCT/KR2013/006697
- Apparatus communication system equipped with proximity synchronization mechanism and method for operating same
Mayank Goel, Stacie Hibino
PCT/KR2014/011660
- Use of hand posture to improve text entry
Mayank Goel, Jacob O. Wobbrock, Shwetak Patel, Leah Findlater
PCT/US2013/074428
- Methods and systems for managing multi-device interaction using the doppler effect
Sidhant Gupta, Shwetak Patel, Tanvir Islam Aumi, **Mayank Goel**, Eric Larson
PCT/US2014/049175
- Sound-based spirometric devices, systems, and methods
Eric Larson, **Mayank Goel**, Shwetak Patel
PCT/US2014/400,064

SELECTED PRESS

- General **ACM**. People of ACM: Mayank Goel. September 2017.
- FitByte **New Atlas**. FitByte glasses designed to keep an eye on your diet. April 2020.
hackster.io. FitByte Monitors Diets Using Sensors Mounted on Glasses. April 2020.
- Digital Ventriloquism **Gizmodo**. This Smart Speaker Prototype Can Throw Its Voice Like a Ventriloquist. April 2020.
hackster.io. "Digital Ventriloquism" Brings Interactivity to Otherwise Silent Objects Through Clever Projection. April 2020.
- Eyes on the Road **ZDNet**. A novel solution to curb phone use by drivers. April 2020.
- GymCam **HackADay**. GymCam knows exactly that you've been doing in the gym. September 2019.
ACM Tech News. GymCam tracks exercises that wearable monitors cannot. September 2019.
Medgadget. GymCam automatically classifies, counts exercise reps. September 2019.
- Ubioustics **Futurity**. Sound and vibrations let smart devices know where they are. October 2018.
Tech Crunch. This robot uses lasers to 'listen' to its environment. October 2018.
- SpiroCall **Tech Crunch**. SpiroCall measures lung health over any phone - no app necessary. May 2016.
Times of India. Test your lung function over a call. May 2016.
Medical News Today. Lung function measured in just a phone call with new health-sensing tool.
NVIDIA Blog. Waiting to Exhale: Using Deep Learning and a Cell Phone to Check Lung Health.
DOTmed. Researchers develop SpiroCall to measure lung function over the phone. May 2016.
Digital Health Age. Lung health diagnosis is just a phone call away. May 2016.
NDTV India. New tool can measure lung functions over phone call. May 2016.
Tech Times. SpiroCall system measures lung health with just one phone call. May 2016.
MedGadget. SpiroCall puts a spirometer inside any mobile phone to measure lung function.
Lung Disease News. U. Washington Scientists' Sensing Tool Measures Lung Function over Calls from any Phone, Anywhere. May 2016

- HyperCam **Smithsonian.** This Camera Sees What Your Eyes Can't. October 2015.
GeekWire. Microsoft And UW Tech Takes Pictures That Are More Than Skin Deep. October 2015.
CNET. New Camera Captures Invisible Details, Sees Through The Skin of Fruit. October 2015.
Engadget. Researchers Build A Cheap Camera That Sees What We Can't. October 2015.
HF Magazine. The Possibilities Of HyperCam In Mobile Phones. October 2015.
New Atlas. HyperCam would let you see the unseen. October 2015.
- BiliCam **Medgadget.** Smartphone App May Detect Neonatal Jaundice. August, 2014.
Reuters. Smartphone App May Allow Parents To Screen Newborns For Jaundice. September, 2014.
Gizmodo. Jaundice In Newborns Will Be Detected By A Smartphone App. September, 2014.
Geekwire. UW Researchers Crowdfunding For App That Helps Parents Detect Jaundice. Oct., 2014.
Huffington Post. Smartphone App May Allow Parents To Screen Newborns For Jaundice. Sep., 2014.
- SpiroSmart **The Economist.** Teaching Old Microphones New Tricks. June, 2013.
TEDMED. The Smartphone Physical: The Evolution Of The Checkup. April, 2013.
MIT Technology Review. Tracking Lung Health With A Cell Phone. January, 2013.
Gizmodo. Just Breath On Your Phone To Make Sure Your Lungs Are Healthy. September, 2012.
CBS. Spirosmart App Lets Phone Accurately Measure Lung Capacity. September, 2012.
CNET. See How Healthy Your Lungs Are -- Just Blow Into Your Phone. September, 2012.
- GripSense **MIT Technology Review.** What Comes After The Touch Screen? October, 2012.
- WalkType **New Scientist.** Touchscreens Learn Your Habits To Help You Type Faster. June, 2012.
Geekwire. Better Typing While Walking, And Other Cool Stuff From UW. October, 2011.