

Michael L. Rivera

Carnegie Mellon University
Human-Computer Interaction Institute
5000 Forbes Ave, Pittsburgh, PA 15213

Website: <http://mikeriv.com>
Email: mlrivera@cs.cmu.edu
Github: [mrivalee](#)

EDUCATION

Carnegie Mellon University, School of Computer Science Sep 2015 - Present
Ph.D. in Human-Computer Interaction
Advisor: Scott Hudson

University of Pennsylvania, School of Engineering & Applied Science Sep 2009 - May 2014
M.S.E. in Computer Graphics and Game Technology, GPA: 3.94 / 4.00
B.S.E. in Digital Media Design, GPA: 3.54 / 4.00
Advisor: Norman Badler

PROFESSIONAL EXPERIENCE

Facebook, Software Engineer, New York, NY Jul 2014 - Aug 2015
iOS and Android Product Engineer on the Places Team. Implemented modular result cards for Nearby Places on Facebook for iOS. Single handedly built the redesigned Nearby Places for Facebook for Android. Developed an edit flow for Places Home Creation on Facebook for iOS.

Facebook, Software Engineer Intern, Menlo Park, CA May 2013 - Aug 2013
Android Engineer on the Facebook Home Team. Built a scalable viewpager with spring animations for the application launcher of Facebook Home for Android.

LinkedIn, Software Engineer Intern, Mountain View, CA May 2012 - Aug 2012
iOS and Mobile Web Engineer for the Mobile Team. Developed event bubble display items and an internal settings module for an iOS calendar widget library. Implemented the 'Send Congrats' feature for the LinkedIn mobile web application.

INVITED PRESENTATIONS

University of Pennsylvania, Penn-Interdisciplinary Talks, Philadelphia, PA Apr 2014
Tracheal Aire – a step towards patient-specific medical instruments

Society for Technology in Anesthesia, Engineering Challenge 2014, Orlando, FL Jan 2014
Tracheal Aire: Patient-specific 3D Printable Williams Airway Intubators

University of Maryland, Baltimore County, McNair Scholars Conference, Baltimore, MD Sept 2013
Project PAALM: Phalangeal Angle Approximation through the Leap Motion Controller

University of Pennsylvania, Big Think Innovation Conference, Philadelphia, PA Mar 2013
Hacking New Frontiers: 3D Gesture Recognition

SELECTED PROJECTS

Tracheal Aire , 3D Printable Patient-specific Williams Airway Intubators Allows physicians to use measurements taken from a CAT scan to generate a customized airway intubator for a particular patient. <i>Society for Technology in Anesthesia 2014 Engineering Challenge, 1st Place.</i>	Jan 2014
Project PAALM , Leap Motion Controller and Autodesk Maya Plugin Supports real-time animation in Maya by quickly approximating the phalangeal joint angles of a user's hand gestures.	May 2013
Phase Change , Collaborative Sound Creation & Visualization Allows users to create, layer, and shape 30-second sound recordings in an online branch-based versioning system.	Apr 2013
Brobots , Collaborative Gesture-Controlled Robot Permits remote users to control different aspects of the robot's functionality using gestures detected through the Leap Motion Controller.	Feb 2013
Social Sign , Multi-user American Sign Language Translator Detects gestures using the Leap Motion Controller and communicates them as text and images in an online chat room.	Jan 2013

TEACHING EXPERIENCE

Teaching Assistant , University of Pennsylvania, Philadelphia, PA	
Digital Media Design Capstone Project Course (CIS-497)	Fall 2013, Spring 2014
Introduction to Java Programming (CIS-110)	Fall 2013
Software Design and Engineering (CIS-350)	Spring 2013

TECHNICAL SKILLS

Programming Languages Java, Javascript, Python, Objective-C, C++, C
Development Frameworks iOS, Android, Arduino, Node.js, Flask, Backbone, JQuery, OpenGL
Fabrication 3D Modeling, 3D Printing (FDM)

AWARDS AND HONORS

DreamIt Health Open Canvas Accelerator , <i>Finalist</i>	2014
Society for Technology in Anesthesia 2014 Engineering Challenge , <i>1st Place</i>	2014
Penn Interdisciplinary Talks , <i>Finalist</i>	2014
PennHacks Hardware Hackathon , <i>3rd Place (of 40 teams)</i>	2013
LinkedIn Company Hackday , <i>1st Place</i>	2012
University College London , <i>Affiliate Computer Science Student</i>	2012
PennApps Hackathon 2012 , <i>Best Use of the Tumblr API sponsored by Tumblr</i>	2012

PRESS COVERAGE

MedCity News , "Pediatric hospital physicians form 3D printing 'think tank'"	Feb 2014
MAKE Magazine , "Hacking on the Frontier of Gestural Input"	Feb 2012

REFERENCES

Norman I. Badler, Professor of Computer Science, University of Pennsylvania

Justin Moore, Engineering Manager, Facebook