

# Irfan Essa

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■ Most entries in this CV are in listed in a Reverse Chronological order, with most recent items at the bottom. In a PDF file view online, a click on a highlighted text/link like *Research* will get you directly to that section, or to an external link (e.g. <http://prof.irfanessa.com>) as appropriate. Additional details and papers available from the website <http://prof.irfanessa.com>. ■

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## EDUCATIONAL BACKGROUND

Degree	Year	University	Field
Ph.D.	1995	Massachusetts Institute of Technology, Cambridge, MA., USA.	Media Arts & Sciences
S.M.	1990	Massachusetts Institute of Technology, Cambridge, MA., USA.	Engineering
B.S.	1988	Illinois Institute of Technology, Chicago, IL., USA.	Engineering

## EMPLOYMENT HISTORY

Title	Organization	Years
Professor	School of Interactive Computing / College of Computing Georgia Institute of Technology, Atlanta, GA., USA	2008-Present
Adjunct Professor	School of Electrical and Computer Engineering, Georgia Institute of Technology, Atlanta, GA., USA	1998-Present
Researcher/ Consultant	Google Research Mountain View, CA, USA & Atlanta, GA, USA	2011-Present
Adjunct Professor	Robotics Institute Carnegie Mellon University , Pittsburgh, PA., USA	2008-2009
Visiting Scientist	Disney Research Pittsburgh, PA., USA	2008-2009
Associate Professor	School of Interactive Computing / College of Computing Georgia Institute of Technology, Atlanta, GA., USA	2002-2008
Assistant Professor	College of Computing Georgia Institute of Technology, Atlanta, GA., USA	1996-2002
Research Scholar/Scientist	Media Laboratory, Perceptual Computing Section, Massachusetts Institute of Technology, Cambridge, MA., USA	1994-1996
Research Assistant	Media Laboratory, Perceptual Computing Section, Massachusetts Institute of Technology, Cambridge, MA., USA.	1988-1994
Researcher	Vision, Graphics and Visualization Group, Thinking Machines Corporation, Cambridge, MA., USA	1990

## ADMINISTRATIVE POSITIONS

Title	Organization	Years
Founding Director	Computational Perception Laboratory at Georgia Tech	1996-Present
Founding Member	Aware Home Research Initiative at Georgia Tech	1999-Present
Founding Director	Computational Journalism Initiative at Georgia Tech	2008-Present
Associate Director	GVU Center at Georgia Tech	2004-2005
Director	Georgia Tech, College of Computing's Summer Internship Program for Underrepresented Minorities	1998-2000

## CURRENT FIELDS OF INTEREST

### Research Topics:

Computational Photography and Video; Video Analysis and Synthesis; Temporal Models; Computational Journalism; Human-centric Multimedia; Behavior Imaging & Activity Recognition

### Research Areas:

Computer Vision; Computer Graphics and Animation; Robotics; Human-computer Interaction; Machine Learning; Numerical Modeling; Computational Perception; Artificial Intelligence; Multimedia; and Games & Entertainment.

## I. TEACHING

### A. Courses Taught

■ In Reverse Chronological order, most recent at the bottom. ■

Term/Year	Course Number & Title	Number of Students	Comments
<b>Media Laboratory, Massachusetts Institute of Technology.</b>			
Spring, 1995	MAS 961 Machine Understanding of Video	15	New
<b>College of Computing, Georgia Institute of Technology.</b>			
Winter, 1997	CS 7321 Low-level Computer Vision	26	Revised
Spring, 1997	CS 7322 High-level Computer Vision	15	Revised
Fall 1997	CS 7100 Introduction to Grad Studies	40	Revised
Fall 1997	CS 8113 Computational Perception	15	New
Winter 1998	CS 7321 Low-level Computer Vision	15	
Spring 1998	CS 7322 High-level Computer Vision	20	
Fall 1998	CS 7100 Introduction to Grad Studies	41	
Spring 1999	CS 4803/8113 Digital Special Effects	22	New
Spring 2000	CS 4480 Digital Video Special Effects	32	New
Spring 2001	CS 4480 Digital Video Special Effects	26	
Spring 2002	CS 4480 Digital Video Special Effects	25	
Spring 2002	CS 4496/7496 Computer Animation	33	Revised
Spring 2003	CS 4480 Digital Video Special Effects	37	
Spring 2003	CS 7496 Computer Animation	18	
Spring 2004	CS 4480 Digital Video Special Effects	50	
Fall 2004	CS 4496/7496 Computer Animation	45	Revised
Spring 2005	CS 4480/8113dfx Digital Video Special Effects	30	
Summer 2005	CS 4001 Computerization, Professionalism & Society	20	Barcelona
Summer 2005	CS 4803CP Computational Photography	38	New
Spring 2006	CS 4480/8113dfx Digital Video Special Effects	30	
Summer 2006	CS 4001 Computerization, Professionalism & Society	20	Barcelona
Summer 2006	CS 4475 Computational Photography	38	New Course #
Spring 2007	CS 4480/8803dfx Digital Video Special Effects (SE)	35	Revised
Spring 2007	CS 4803cj/8803cj Computational Journalism	31	New
Spring 2008	CS 4001 Computerization, Professionalism & Society	30	
Spring 2008	CS 4803cj/8803cj Computational Journalism	40	New
Spring 2010	CS 4001 Computerization, Professionalism & Society	30	
Spring 2010	CS 4464/6465 Computational Journalism	40	New
Summer 2010	CS 4001 Computerization, Professionalism & Society	30	Barcelona
Summer 2010	CS 4475 Computational Photography	40	Barcelona
Spring 2011	CS 4001 Computerization, Professionalism & Society	35	
Spring 2011	CS 4475 Computational Photography	30	
Spring 2012	CS 4464/6465 Computational Journalism	40	
Spring 2012	CS 8803PHO Advanced Computational Photography	10	

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