

EDUCATION	Class of 2012	Cornell University, B.S. Electrical and Computer Engineering, <i>ITHACA, NY</i> Rawlings Presidential Research Scholar • 2011 Kessler Fellow • Dean's List • Quill and Dagger Senior Honor Society • President's Sustainable Campus Committee
RESEARCH	Fall 11 - Present	Fab@Home Multi-Material 3D Printer <i>CORNELL CREATIVE MACHINES LAB</i> Electrical team leader for development of highly-accessible 3D printer - www.fabathome.org
	Fall 10 - Spring 11	Stochastic Modular Self-Assembly Research <i>CORNELL CREATIVE MACHINES LAB</i> Electrical design, fabrication, and programming for autonomous micro-scale components of "programmable matter" system - www.creativemachines.org/stochastic-modular-assembly
	Fall 09 - Spring 11	Machine Metabolism Research <i>CORNELL CREATIVE MACHINES LAB</i> Development of systems and programming for use with structure-modifying robots. Publication In Press. Presented at NCUR 2011. - www.creativemachines.org/machine-metabolism
	Fall 08 - Fall 09	Solar Home Energy Tracking and Controls Research <i>CORNELL SOLAR DECATHLON</i> Developed control and energy monitoring network for a solar-powered prototype house
	Fall 05 - Spring 08	Prosthetics Research <i>UNIVERSITY OF NEW BRUNSWICK, CANADA</i> 2008 Intel Science Talent Search Finalist Paper: "Using Force Sensors to Effectively Control a Below-Elbow Intelligent Prosthetic Device" Publication: "Cancellation of Force Induced Artifacts in Surface EMG Using FSR Measurements"
WORK EXPERIENCE	Summer 11 - Present	Makerbot Industries <i>ENGINEERING AND BUSINESS KESSLER FELLOW/CONSULTANT BROOKLYN, NY</i> Developing consumer-level 3D printer technology - www.makerbot.com
	Spring 11 - Present	element14 Engineering Community <i>ARDUINO EXPERT, VIDEO PRODUCER, BLOGGER</i> Contracted to create tutorial videos, field questions, and write blog posts - www.element14.com
	Summer 10	DEKA Research and Development <i>ELECTRICAL ENGINEERING INTERN MANCHESTER, NH</i> Designed and tested next-generation circuit boards for "LUKE" Prosthetic Arm
	Spring 07 - Spring 11	UltimateComputers.net <i>FOUNDER AND ADMINISTRATOR</i> Advertising-supported online technology community - www.ultimatecomputers.net
	Summer 08 & 09	Electrical Science, Inc. <i>ENGINEERING CONSULTANT PORT CHESTER, NY</i> VoIP gateway development, Linux system administration, cellular transmission analysis, water usage tracking system
	Summer 08	Convolve Inc. <i>ENGINEERING INTERN ARMONK, NY</i> Created "DeepNote Bot" to accurately play "Guitar Hero" - www.mechanizedrock.com Special Recognition Award, Parallax Propeller Contest
	Fall 04 - Fall 10	Armonk Computer Solutions <i>FOUNDER, A+ CERTIFIED IT TECHNICIAN ARMONK, NY</i> Provided computer, networking and web design services - www.armonkpc.com
	Spring 03 - Spring 08	Illusion Montages <i>FOUNDER ARMONK, NY</i> Launched and ran successful video montage business - www.illusionmontages.com
ACTIVITIES & LEADERSHIP	Fall 09 - Present	Cornell University Sustainable Design <i>FOUNDER, DIRECTOR, TEAM LEADER, WEB MASTER</i> Developed design-build team and interdisciplinary curriculum to address sustainability issues through research, design, and construction. Projects include construction of S. African schoolhouse and on-campus sustainability research facility - cusd.cornell.edu
	Fall 08 - Fall 09	Cornell University Solar Decathlon <i>ENGINEERING CONTROLS TEAM LEADER, WEB MASTER</i> Engineering controls team leader, automation/entertainment sponsorship facilitator, website scripting for solar-powered home - cusd.cornell.edu/silo
AWARDS & RECOGNITION		2012 IEEE "New Face of Engineering" winner • Cornell's "25 Most Interesting Seniors" • Bank of America Award, SudoGlove • Cornell Distinguished Leadership Award Nominee • Intel Science Talent Search Finalist • Rensselaer Medal • YouTube EDU Partner • EE work featured on Discovery Channel, Hack-a-Day, Amp Hour Podcast, Engadget, Gizmodo, NYTimes, Arduino Blog, EEWeb, element14, Adafruit, Makezine, Dangerous Prototypes, Parallax.com, & Cornell Daily Sun
TECHNICAL EXPERIENCE		Software and Systems Adobe Premier, Photoshop, Dreamweaver, InDesign, Illustrator, and Acrobat • Quartus • Matlab • Eagle CAD • Labview • MS Office Suite • Sketchup • Alibre CAD • OpenSCad • Linux Shell • AVR and MSP430 Development • MySQL • PADs Code HTML • CSS • PHP • Javascipt • Python • Verilog • Matlab • Basic • Processing/Arduino • Parallax Spin • C • Shell Script Hands-on Woodworking • Soldering • Circuit Design • Lasercutting • 3D Printing • Computer Building • Public Speaking & Teaching
INTERNET PRESENCE		Personal Blog & Portfolio • www.jeremyblum.com Twitter • www.twitter.com/sciguy14 Youtube Channel • www.youtube.com/sciguy14 LinkedIn Profile • www.linkedin.com/in/jeremyblum