

PROFILE	Engineer with a background in additive manufacturing and biomaterials					
EDUCATION	Georgia Institute of Technology		Atlanta, GA			
	Doctor of Philosophy in Bioengineering		GPA: 3.5 – 10/2015			
	Georgia Institute of Technology		Atlanta, GA			
	Master of Science in Mechanical Engineering		GPA: 3.7 – 12/2013			
	Georgia Institute of Technology		Atlanta, GA			
	Bachelor of Science in Biomedical Engineering (highest honors)		GPA: 3.8 – 05/2008			
SOFTWARE	MATLAB/Simulink	ANSYS	SOLIDWORKS	Python	Javascript	
	LabVIEW	COMSOL	Photoshop	C/C++	Java	
EXPERIENCE	DDM Systems		Atlanta, GA			
	Research Engineer/Intern		04/2013 – 8/2015			
	<ul style="list-style-type: none"><li>• Worked with a team of engineers to finalize the operation of a state-of-the-art additive manufacturing machine so that it could operate on a production floor under a tight time-frame</li><li>• Developed the controls for the automation of the preproduction additive manufacturing machine</li><li>• Collaborated with a team of process engineers on the material formulation of a photocurable resin with high loading of silica for investment casting</li><li>• Automated the preprocessing (tiling, support structure, and file compression) of large build files</li></ul>					
	Georgia Tech Mechanical Engineering		Atlanta, GA			
	Teaching Assistant		01/2013 – 12/2013			
	<ul style="list-style-type: none"><li>• Hired by the School of Mechanical Engineering to TA a course on experimental methods</li><li>• Instructed senior level ME students on proper use of laboratory equipment, conducting experiments, and writing scientific reports</li></ul>					
	Medtronic, CRDM		Minneapolis, MN			
	System Reliability/Summer Associate		05/2008 – 08/2008			
	<ul style="list-style-type: none"><li>• Developed a load sensing device for a bench study to better understand the mechanical use conditions of implanted medical devices</li><li>• Programmed extensively in LabVIEW and MATLAB for control of the device and data processing</li><li>• Designed a variety of mechanical tests on biomedical devices using Instron and Bose equipment</li></ul>					
	Georgia Tech Biomedical Engineering		Atlanta, GA			
	Teaching Assistant		09/2006 – 04/2007			
	<ul style="list-style-type: none"><li>• Hired by the Biomedical Engineering Department at Georgia Tech to TA a course on the use of sensors and instrumentation for biomedical applications</li><li>• Mentored students on their design projects</li></ul>					
RESEARCH	Direct Digital Manufacturing Lab, ME/BioE		Atlanta, GA			
	PhD Candidate advised by Dr. Suman Das		08/2008 – Present			
	<ul style="list-style-type: none"><li>• Developed material preparation techniques and processing parameters for selective laser sintering of 3D microarchitected composite parts for applications ranging from tissue engineering to electrically conductive polymer nanocomposites</li><li>• Developed models in MATLAB and COMSOL to determine the functional properties of the parts with different filler loadings and architectures</li><li>• Investigated photopolymerization of hydrogels for soft tissue engineering fabricated by large area maskless photopolymerization</li></ul>					
	Biomechanics Lab, ME/BME		Atlanta, GA			
	Undergraduate Research Assistant advised by Dr. Ray Vito		08/2006 – 12/2007			
	<ul style="list-style-type: none"><li>• Collaborated with a graduate mentor to develop 3-D mechanical models of atherosclerotic coronary arteries in order to predict plaque rupture</li><li>• Used MATLAB to automate image processing of histological sections and Amira for reconstruction of a segmented 3D model</li><li>• Self-initiated learning in programming languages, mechanical modeling, and atherosclerosis</li><li>• Sectioned and stained coronary arteries in a histology lab</li></ul>					