GLENN D. SNYDER

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Education:

Rochester Institute of Technology	**Rochester Institute of Technology**	**Morehouse College**
M.S. Electrical Engineering 2009	**B.S. Electrical Engineering 2007**	**B.S. Applied Physics 2007**
GPA: 3.5/4.0		
Availability: September 2009		

Skills: Auto-CAD; Ansoft Designer; C/C++; Orcad Capture CIS; LabView; Matlab; Webots

Projects:

Thesis Research: Deriving kinematic model and modeling dynamic model uncertainty through use of robust control for 5 degrees of freedom robotic arm.

Design Project: Designed and constructed a two way communication device that will allow deaf or hard of hearing students in engineering or science to more efficiently communicate with tutors or professors in an individual or group environment.

MEMS Evaluation: Verified and evaluated operating characteristics of Freescale Pressure Sensor.

Advanced Control: Designed lead and/or lag compensator system for linear systems and sliding mode controller, adaptive controller, and optimal continuous time PID controller for non-linear systems.

Robust Control: Designed and modeled robust controller for magnetic ball levitation system while modeling and implementing an electromagnet as outside disturbance in Matlab and Simulink software.

Neural Networks: Pattern Recognition of multiple ship images classified through feed forward back propagation net using Neural Networks Toolbox in Matlab.

Antenna Theory: Ansoft Designer and Matlab used to study radiation patterns of linear dipoles, aperture antennas, arrays, electromagnetic horn antennas, microstrip antennas, and reflector antennas.

Microwave Circuit: Ansoft Designer, Matlab, and microwave network analysis used to study the fundamentals of wave guides, coax, microstrip and stripline, and microwave resonators.

Radar Engineering: Matlab used to visually study factors affecting radar range, signal detection in noise, decision criteria and target identification techniques.

Experience:

Biomechatronic Learning Laboratory- Rochester Institute of Technology
Research Assistant   June 2008 - Present
Developing software platform for 5 degrees of freedom Katana harmonic arm in MATLAB. Deriving kinematic model for harmonic arm using Denavit-Hartennberg parameters. Using Webots simulation software to create 3D environments that incorporates physics modeling.

NAVSEA Warfare Center Carderock - Electromagnetic Signatures Code - Bethesda, MD
Intern   June 2006 - August 2006
Fabricated photonic crystals by using CNC G-code and a milling machine to construct various aperture arrays. Performed raster scans of photonic crystals to measure near fields in different transverse modes. Developed a GUI in MATLAB that more efficiently acquires and processes data from a vector network analyzer.

Hewlett Packard - funded project- Rochester Institute of Technology
Research Assistant   February 2005 - November 2005
Characterization of toner consumption in Hewlett Packard LaserJet 3700 printers. Leveraging existing toner consumption model using MATLAB software. Developed metrics that maximized toner particle consumption in the area of electrophotography.

Honors: Amorese Graduate Scholarship; Young Achiever Award; NACME Scholarship; Coro Center for Civic Leadership Problem Solving Fellow

Activities: National Society of Black Engineers (NSBE) - RIT Chapter, RIT Community Advocate Graduate Assistantship, Presidents Board for Promoting Pluralism and Inclusion - Student Representative, Stay Tech at RIT project sponsored by the Semiconductor Industry Association - Star Mentor, Graduate Teaching Assistant