Nicholas Christopher Bell, E.I.T.
8231 Golden Chickasaw Circle
Orlando, Florida 32825
(540) 525-0747
nibell82@gmail.com

Objective Use my knowledge of material properties and processing to contribute to technological advancements in a dynamic, cutting-edge environment

Education

University of Central Florida, Orlando, FL
Started graduate coursework in Materials Science and Engineering

Virginia Polytechnic Institute and State University, Blacksburg, VA
B.S. Materials Science and Engineering, *cum laude*, May 2005

- **MSE Engineering Communications Program:** Written and oral technical communication, teamwork, ethics, and interpersonal communication
- **MSE Senior Design Project:** Characterization of the Effect of Film Thickness on the Electrochemical Impedance of Nanoporous Gold

Experience

M Cubed Technologies Inc., Newark, DE
Process Engineer – Advanced Materials, November 2005 – September 2006 & July 2008 – December 2008

- Wrote procedures describing the manufacturing processes for various Si-SiC composites
- Trained technicians in infiltration process of SSC, HSC, and RBBC composites
- Proposed corrective actions to eliminate specific failure modes in the manufacturing process
- Programmed a Coordinate Measuring Machine (CMM) to measure in-process and final dimensions of RBBC armor products
- Created databases to link together process information and make data more accessible

Ceradyne, Inc., Costa Mesa, CA
Armor Development Engineer – Research and Development, September 2006 – July 2008

- Planned and executed experiments to determine ballistic limits of various ceramic, metallic, and composite laminate systems
- Used DOE to analyze and run lap shear experiments for a variety of adhesives and manufacturing variables
- Worked with production engineers to develop tooling and strategies necessary to transition from coupon design to final product
- Designed and project managed an armor solution to meet U.S. Army's Long Term Armor Strategy (LTAS) for Tactical Wheeled Vehicles
- Traveled to witness and test designs as well as to attend short courses (in penetration mechanics and adhesive science) and conferences

Nanomaterials Science and Engineering Internship, Rutgers University
Participant, June 2004 – August 2004

- Researched Nanomechanical Mapping of Artificial White Spot Lesions
- Prepared samples and measured their hardness and modulus using a Hysitron Triboindenter
- Presented results to biomedical and engineering faculty as part of the Summer Student Research Symposium

ITT Industries – Nightvision Co-op, Roanoke, Virginia
Manufacturing Engineer, January 2002 – August 2003

- Performed failure analysis testing on ceramics and metals (with aid of scanning electron microscope) and maintained a database of all results for weekly meetings
- Co-authored two major internal reports: *Development of Hybrid Photodetectors Using Single Crystal III-V Photocathodes* and *Hybrid APD for Single Visible Photon Imaging*

Computer Skills

AutoCAD 2007	Microsoft Office	Stat-Ease
MATLAB	SolidWorks 2007	CES 4.0