

Ryan Christopher Dumlao

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EDUCATION

Graduate: University of California, Los Angeles (2008 – 2010)

MS, Electrical Engineering - Solid State & Photonics

Master's Project: Model for Calculating the Surface State Density and Resistivity in n-doped GaAs nanopillars

Undergraduate: University of California, San Diego (2003 – 2007)

BS, Electrical Engineering - Photonics

Minor, Japanese Studies

Kyoto Sangyo University, Kyoto, Japan – Education Abroad Program (Summer 2004)

WORK EXPERIENCE

Electrical Engineer, Engineering Rotation Program (9/2011 – Present)

Raytheon Company, Space and Airborne Systems, El Segundo, CA

- 2-year program that rotates between a variety of engineering and non-engineering functions for 6-month spans for purposes of engineering breadth, leadership development and exposure to all business facets
- **Optical Engineer – Current Rotation**
 - Responsible for testing, alignment, and characterization of space-grade optical components and systems
 - Use of interferometers, high-powered gas and solid-state lasers, laser trackers, space-grade materials
 - Team member of Visible Infrared Imager Radiometer Suite (VIIRS) program for NASA Joint Polar Satellite System (JPSS)
- **Material Quality Manager – Completed Rotation in Supplier Quality**
 - Manage, communicate and investigate root-cause and corrective-actions for top-tier suppliers
 - Consistently interface with programs, customers and suppliers to ensure smooth delivery and production
 - Solely responsible for management of quality for 3 space/airborne programs' supplier relationships
- **Financial Analyst – Completed Rotation in Engineering Finance**
 - Financial budgeting, reporting & analysis; use of SAP, Control XL, and macro-enabled Excel
 - Ownership of weekly reports and analysis on \$18M overhead budget for executive-level reporting, forecast and trends, enhancing processes
 - EVMS Level 1 Certified

Electrical Engineer II (7/2010 – 9/2011)

Raytheon Company, Space and Airborne Systems, El Segundo, CA

- Responsible for electrical PCB design & testing, technical documentation, hardware teardown, proposal work, product data management (PDM) system on airborne radar programs (F/A-18 Radar, Japan F-15 Radar)
- Responsible for FPGA & VXI board design, oversight of fabrication, checkout & integration processes
- Experience with Mentor Graphics schematic design, Xilinx ISE FPGA / VHDL development, LabVIEW

Teaching Assistant (1/2009 – 12/2009)

Department of Chemistry and Biochemistry, University of California, Los Angeles

- Instruct and advise three classes of 30 students for an undergraduate general chemistry course

Jr. Electrical Engineer (1/2007 – 6/2008)

Space Micro, Inc, San Diego, CA

- Responsible from concept-to-fruiton of low-dose passive radiation detector for NASA Ames
- Responsible for electrical design and test, software and mechanical workings for SBIR contracts
- Work in a controlled small-scale ESD laboratory environment with radiation sources

SKILLS

- **Software Experience:** Mentor Graphics Design Architect, LabVIEW, Xilinx ISE, Matlab, ORCAD PSpice, Punch ViaCAD, Microsoft Office, Adobe Photoshop, Adobe Premiere, SAP-based environments, Linux Operating Systems
- **Hardware Experience:** Oscilloscopes, Logic Analyzers, Military-spec assemblies and control panels, FPGA Interfaces (JTAG), Interferometers, Lasers, Laser Trackers, Optical Systems, Class 1000+ Cleanrooms
- **Programming experience:** C, C++, VHDL, Java, Android SDK, HTML5, CSS, JavaScript (Basic to Intermediate)
- **Certifications:** Raytheon Six Sigma Specialist, Earned Value Management System (EVMS) Level 1, NI LabVIEW Level 1 Certification

RESEARCH & PROJECTS

- Master's Project: Model for Calculating the Surface State Density and Resistivity in n-doped GaAs nanopillars
- Low-Dose Passive Radiation Detection using 1MBit EPROMs

AWARDS AND HONORS

- Eagle Scout – Boy Scouts of America, San Francisco Bay Area Council (03/2003)
- UC San Diego, Provost's Honors (2004-2006)
- Eta Kappa Nu Electrical and Computer Engineering Honor Society
- Individual & Team Achievement Awards (2011, 2012, 2013) – Raytheon Company

MEMBERSHIP AND AFFILIATIONS

- SPIE International Society for Optical Engineers, UCSD Chapter (2005 – 2007)
 - Webmaster, 2006-2007 Academic Year
- UCSD Nikkei Student Union (2003 – 2007), Officer (Japanese-American Interest Organization)
 - Webmaster 2004, Executive Board 2006-2007
- UCLA Engineering Graduate Student Association (2008 – 2010)
- UCLA Nikkei Student Union (2008 - 2010)
- Society of Aerospace Professionals, El Segundo, CA (2010 – Present)

INTERESTS

Photography, Computers, Electronics, Automobiles, Snowboarding, Surfing, Tae Kwon Do, Web Design

REFERENCES AND DETAILED RELEVANT COURSEWORK PROVIDED UPON REQUEST