ARMAND RUNDQUIST

NeoPhotonics ◇ 40931 Encyclopedia Circle ◇ Fremont, CA 94538
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EDUCATION

Stanford University June 2015
Ph.D., Electrical Engineering *Stanford, CA*

Stanford University September 2011
M.S., Electrical Engineering *Stanford, CA*

Utah State University May 2009
B.S., Electrical Engineering (summa cum laude) *Logan, UT*
B.A., Mathematics (summa cum laude)

EXPERIENCE

NeoPhotonics May 2016 – present
Laser Design Engineer *Fremont, CA*

· Designed, simulated, and oversaw fabrication of InP distributed feedback lasers and related optical structures, guiding the development of new products from concept through pilot production.
· Analyzed data and characterized processes using tools such as JMP, Python, Excel, and Mathematica to validate designs and improve both device performance and reliability.

Stanford University January 2010 – June 2015
Research Assistant, under Professor Jelena Vuckovic *Stanford, CA*

· Developed new techniques for solid-state quantum information processing and non-classical light generation in a semiconductor platform by coupling quantum dots to photonic crystal cavities.
· Designed and simulated nanophotonic devices with a variety of tools, including Matlab, COMSOL Multiphysics, finite-difference time-domain modeling, and QuTiP (Quantum Toolbox in Python).
· Fabricated structures in silicon and GaAs using electron-beam lithography and reactive ion etching.
· Gained extensive optics laboratory experience, with both free-space and fiber-coupled configurations.
· Presented talks at five scientific conferences, in both the United States and Germany.

Stanford Pre-Collegiate Summer Institutes June – July 2014
Instructor *Stanford, CA*

· Designed and taught an introductory course on electronics, computers, and communication to a diverse group of high school students as part of an intensive *Topics in Engineering* summer program.

Stanford University January 2011 – June 2014
Course Assistant, under Professor Jelena Vučković *Stanford, CA*

· Tutored students, ran discussion sessions, and wrote problems for several graduate-level courses.

Air Force Research Laboratory, Kirtland Air Force Base May – August 2009
Directed Energy Scholar, High-Powered Microwaves Division *Albuquerque, NM*

· Implemented diagnostic tools for the Shiva Star magnetized target fusion experiments.

IREAP, University of Maryland, College Park June – August 2008
Student Researcher, Summer TREND Program *College Park, MD*

· Constructed a dark-field optical microscope to characterize semiconductor and metallic nanoparticles.