Andrew W. Forrester — Résumé

Contact: University of California, Los Angeles
Dept. of Physics and Astronomy
430 Portola Plaza, Box 951547
Los Angeles, CA 90095-1547, USA

Email: aforrester (at symbol) ucla (period) edu
Website: http://aforrester.bol.ucla.edu
Office: Knudsen B-130
Phone: (310) 825-3959 (office)

Objectives: After obtaining my Ph.D. in physics, I plan to work on entrepreneurial business projects. I will also continue as a physics researcher and educator in some capacities.

Education:

University of California, Los Angeles (UCLA) ..... 2005 – present
Ph.D., Physics (expected 2012 September)
M.S., Physics (2007 June)
⋆ Fellowship: Graduate Assistance in Areas of National Need (GAANN)

California State University, Long Beach (CSULB) ..... 2000 – 05
B.S., Physics and Mathematics (2005 May)
⋆ President's Scholarship: Full (tuition, room/board, etc.) 4-year academic scholarship at CSULB

Experience:

Graduate research ..... 2005 – present
Currently at UCLA I am working with Dr. Gary Williams on a vortex-loop theory of the superfluid phase transition. I have also done research on gravito-electromagnetism and quantum field theory. My extensive notes are available on my website, along with the other papers mentioned here.

Financial work ..... Winter 2012
I worked at Euro Pacific Capital under the Los Angeles branch Vice President Mr. John Downs as an analytic and administrative intern. I started my work by writing a program to automate some of the financial calculations they were doing partly by hand. From there I moved into some financial and conceptual analysis and helped with electronic communications and some other administrative tasks. I left after a few months since they no longer had time to devote to the more interesting and complicated tasks (and wouldn't regain that time in the near future) and also so that I could refocus on finishing my doctoral work.

Undergraduate senior thesis ..... 2003 – 05
As a culmination of my participation in the University Honors Program at CSULB, I did research in quantum mechanics with my advisor, Dr. Chi-Yu Hu, and wrote a paper titled "Spectroscopy of Antihydrogen in a Laser Field via the Time Dependent Schrödinger Equation".

CERN Summer Student Program ..... Summer 2004
For this Research Experience for Undergraduates (REU) program, Northeastern University and the National Science Foundation (NSF) funded my travel to and from the European Organization for Nuclear Research named CERN. I attended a lecture series with 160 other students and worked on my individual research project under the supervision of Drs. Marco Calvi and Andrzej Siemko. I wrote a paper on my research titled "Simulating Quench Signals in the LHC Superconducting Dipoles". I also gave a lecture on my research, and it can be viewed from my website.

Los Alamos Summer School (LASS) in Physics ..... Summer 2003
LASS is another REU, funded and run by the NSF, the Los Alamos National Laboratory, and the University of New Mexico, at Los Alamos. I attended a lecture series with 16 other students and worked on my individual research project under the supervision of my mentor, Dr. Yogesh Joglekar. I wrote a paper on my research titled "Conductivities in Bilayer Quantum Hall Systems," which was published with the other students' papers in the LASS Research Reports, Volume 6.

Atomic force microscopy ..... 2002 – 03
I worked for Dr. Chuhee Kwon at CSULB, learned how to use an Atomic Force Microscope (AFM), and wrote manuals for Dr. Kwon's classes on how to use the AFM and prepare samples.

Honors:

⋆ 2011: Awarded scholarship to attend the 2011 Mises University at the Ludwig von Mises Institute
⋆ 2009: Awarded funds to travel to India for research as part of the India–U.S. Physics Student Visitation Program by the Indo–U.S. Science and Technology Forum and American Physical Society
⋆ 2005: Graduated from CSULB *magna cum laude* in the University Honors Program, member of Phi Kappa Phi Honor Society, winning awards in both the physics and mathematics departments
⋆ 2005: Awarded for service as president of the CSULB Society of Physics Students (2002–2004)
⋆ 2002: Received Undergraduate Award in Analytical Chemistry from the American Chemical Society