

• nicholas squires •

• CURRICULUM VITAE •

• Los Angeles, CA • E-MAIL arbitraryy@gmail.com •

EDUCATION

./ California Institute of Technology, Center for Technology and Management Education
Certificate – Systems Engineering Fundamentals

./ California State University at Long Beach <CSULB>
Master of Science Physics
Focus: Graphene Multilayers
Department of Physics & Astronomy Graduate Honors

./ University of California Davis
Bachelor of Science Physics, Minor in Mathematics
Focus: High Temperature Superconductivity
College of Letters and Science Highest Honors
Department of Physics Citation
Senior Thesis: The Heisenberg Model for 2D Spin-1/2 Triangular Antiferromagnets: An Application to Cs_2CuBr_4

WORK EXPERIENCE

./ Independent Contractor Current
Software and Systems Engineer • Educator
Software architecture and development, Web development, mathematics curriculum development

./ NRG Energy Inc. Apr 2015
Software, Systems and Communications Architect (Independent contractor) -
Chief communications architect Virgin Limited Edition (VLE) Necker Island Renewable Energy Microgrid Nov 2015

./ The Boeing Company
Software and Systems Engineer – Space, Security and Renewable Energy Systems 1999
Software Development, Project Management, Software Production Management, Release Management, Lab Management, Systems Administration, for numerous space, green energy, and Command and Control Software Programs 2015

./ zzCollective, Inc.
Co-Founder 2011
Software Engineering, Project Management, Business Development, Proposal Development, Financial Management, Field Engineering, Customer Engagement 2014

TEACHING EXPERIENCE

./ The Boeing Company 2011
Instructor – Continuous Integration, Agile Development -
Designed, developed, and administered training materials and training environment for various training sessions on continuous Integration and Agile software development practices 2014

./ Fashion Institute of Design and Merchandising <FIDM> 2007
Lecturer – Math Skills, College Mathematics -
Designed and developed syllabus, teaching materials, web based predictive grading analysis and collaboration tools, and Fashion/Merchandising + Mathematics quarterly mashup projects 2013

ACHIEVEMENTS AND AWARDS

./ Boeing Achievement Award – Technical Leadership in the successful demonstration of Boeing's 2012 Smart Grid Technologies at Smart Grid Live (conference) 2012

./ Boeing Achievement Award – Technical Leadership in the Successful demonstration of Boeing's Smart Grid Technologies to various Government and Energy utility companies 2010

./ Boeing Achievement Award – Technical Leadership in completion and successful 2008

Deployment and delivery of a large scale, fielded command and control software suite

./ FIDM College of General Studies Instructor of the Year Nominee **2007-2012**

./ Boeing Achievement Award – Technical Leadership and development of a novel, Collaborative conference web management software suite **2008**

./ Boeing Advanced Career Training (ACT) Scholarship recipient **1999**

./ 1st and 3rd place awards, California State and Los Angeles County fairs in Mechanical Drafting **1999**

VOLUNTEERING

./ Learning Center Administrator
Downtown Women's Center – Los Angeles, Ca **2016**

./ Introduce a Girl to Engineering – Engineering Week Event
Downtown Value School **2015**

./ Career Day Presentation
Career Day Presentation at the International Institute in Madrid Spain **2013**

./ Life after Graduate School
Guest speaker at CSULB physics club **2011**

./ Software Engineering as a Career
Guest Speaker at Los Nietos Middle School career day **2005, 2006**

**PUBLICATIONS
PAPERS
PRESENTATIONS
INSTALLATIONS**

./ Go Behind the Scenes of Installing an Interactive LED Art Exhibit – Make Magazine **2016**
<http://makezine.com/2016/03/03/go-behind-scenes-installing-interactive-led-art-exhibit/>

./ Secrets of the Universe
Interactive performance and art installations in collaboration with Simonne Jones at Platoon Kunsthalle (Berlin, DE), Berlin Festival Arts Village (Berlin, DE), and ReMake Festival (Berlin, DE), Bremen Theatre (Bremen, DE) **2013**

./ Continuous Integration Best Practices
Written proposal presented to Boeing management **2010**

./ An Agile Approach to Software Production
Written proposal presented to Boeing management **2009**

./ Electronic Excitations in Graphite and Graphene Multi-layers **2009**

./ *Enterprise Social Bookmarking*
Paper presented at the Boeing Software Conference **2005**

MEMBERSHIPS

./ Platoon Kuhnstalle Cultural Development Network **2013**

./ Phi Kappa Phi Honors Society **2004-2009**

OTHER

./ Portfolio: www.arbitrary.com
./ Bitbucket: <https://bitbucket.org/ArbitraryY/>
./ GitHub: <https://GitHub.com/ArbitraryY/>
./ LinkedIn: <https://www.linkedin.com/in/nicholassquires>