

# • nicholas squires •

## • CURRICULUM VITAE •

• Los Angeles, CA • E-MAIL [syntax@arbitraryy.com](mailto:syntax@arbitraryy.com) •

### EDUCATION

- ./ California Institute of Technology, Center for Technology and Management Education **2014**  
**Certificate** – Systems Engineering Fundamentals
- ./ California State University at Long Beach <CSULB> **2009**  
**Master of Science Physics**  
*Focus: Graphene Multilayers*  
Department of Physics & Astronomy Graduate Honors
- ./ University of California Davis **2004**  
**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<sub>2</sub>CuBr<sub>4</sub>*

### WORK EXPERIENCE

- ./ Self-employed **November 2015 - Present**  
**Software, Systems and Communications Architect (Independent contractor)**
- ./ NRG Energy Inc. **April 2015 – November 2015**  
**Software, Systems and Communications Architect (Independent contractor)**  
Chief communications architect Virgin Limited Edition (VLE) Necker Island Renewable Energy Microgrid
- ./ The Boeing Company **1999 - 2015**  
**Software and Systems Engineer – Space, Security and Renewable Energy Systems**  
Software Development, Project Management, Software Production Management, Release Management, Lab Management, Systems Administration, for numerous space, green energy, and Command and Control Software Programs
- ./ zzCollective, Inc. **2011 - 2014**  
**Co-Founder**  
*Software Engineering, Project Management, Business Development, Proposal Development, Financial Management, Field Engineering, Customer Engagement*

### TEACHING EXPERIENCE

- ./ The Boeing Company **2011-2014**  
**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*
- ./ Fashion Institute of Design and Merchandising <FIDM> **2007 – 2013, 2016 – Present**  
**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

### 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 Deployment and delivery of a large scale, fielded command and control software suite **2008**

**2007-2012**

./ FIDM College of General Studies Instructor of the Year Nominee

./ 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**

./ 1<sup>st</sup> and 3<sup>rd</sup> 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**

./ 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**