

Capella Kerst

408-930-9276

4851 Manitoba Drive, San Jose, Ca 95130

capella@berkeley.edu

Education

University of California, Berkeley

B.A. Applied Mathematics to Mechanical Engineering [May 2013]

West Valley College • Saratoga, CA GPA 4.0 2009-2011

Foothill College • Palo Alto, CA GPA 4.0 2004-2005

Santa Teresa High School • San Jose, CA GPA 4.25 2005-2009

Coursework Fluid Mechanics, Solid Mechanics, Mechanical Project Development, AutoCAD, SolidWorks

And Skill sets GoogleSketch Up, Machine Shop, C++, General/Advanced Physics, General Chemistry, Multivariable Calculus, Advanced Linear Algebra and Differential Equations(Upper Division), Abstract Algebra, Real Analysis.

Work/Research

Student Researcher 2012-Present

AFRD Ion Beam Technology Group at Lawrence Berkeley National Lab

Private Tutor 2009 - Present

Tutor K through 12 emphasizes in math and science

West Valley College 2010 - 2011

Math Resource Center Tutor

Westgate Cabana Club 2007 - Present

Swim instructor and lifeguard

Sacred Heart School After-school Program 2010 - 2011

Homework Director

West Valley College-Advanced Transportation Technology and Energy Program 2011

Presenter and Assistant to Solar PV Systems Design Engineer Assisted students and professionals in computer programming and solar panel design

Babysitter 2005 – Present

First-aid, CPR and AED certified

Leadership

American Society of Mechanical Engineers 2011-Present

Treasurer, Assistant Treasurer, and Event Coordinator for UC Berkeley Chapter

Chemical Engineering Car Competition Team UC Berkeley 2011-Present

Mechanical Team Leader in developing an efficient, inexpensive, and sustainable way to power peltier cells which power a car motor; machined a motor stabilizer

NERDS UC Berkeley 2011-Present

Member of New Experiences for Research & Diversity in Science

Machine Shop Trained UC Berkeley 2012-Present

Machinist developed a longboard brake featured at a tradeshow. I participated in a concentrated technical training program and have over 40 hours experience, in the following machine tools; engine lathes, vertical and horizontal milling machines, drill presses, off-hand grinders, belt sanders, band saws, an OMAX Water Jet, a Mori Seiki CNC Lathe.

Alpha Gamma Sigma-Honor Society, West Valley College 2009 - 2011

Conference and Convention Coordinator (2010), *Treasurer* (2011) *Permanent Member for Life* Treasurer's operating budget was \$16,000.

West Valley College Associated Student Organization 2009-2010

Senator, Press Liaison and Organizer of the Budget Cut Rally

West Valley College Theatre 2009-2011

Sound Technician (2009), *Choreographer* (2010), and *Director* (2011)

St. Thomas of Canterbury Church 2005-present

Young Adult Leader

Interests Ballroom dancing Golf Model United Nations Theatre and Dance Photography Poetry

Achievements Lenore and Curtis Mills Engineering Endowment Scholarship(2011)R.V. Garrod Scholarship(2011) Certificate of Appreciation(West Valley College 2011)Summa Cum Laude(2009) California Scholarship Federation Life Member(2006-2009)Golden State Seal Of Merit(2005-2009) AP Scholar(2007-2007) Central Coast Section Senior Scholar Certificate(2009) Einstein Award First Place Sciencepalaza-received junior and senior year(2008,2009) First place at Synopsys Silicon Valley Science and Technology Championship 2009 Silicon Valley Model United Nations Conference-Honorable Mention (2008, 2009)

References References are available upon request