Ronald Marx

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3628 Glacier Rd #3

Eagle Mountain, UT

Summary of Qualifications

Experienced in the collecting, organizing, and analyzing the data of material analysis. Trained in the use of SEM, AFM, and other investigative techniques. Understands changes in group tasks, as well as the logic for change. Modifies behavior to effectively handle new situations. Educated in applied physics principles, the core of solid state physics, mathematical statistics and the basics of semiconductor structure and design

Education and Honors

Bachelor of Science, *Weber State University*, Ogden, UT, April 2014

    Major: Physics with a specialization in the Physics of Materials
    Minor: Mathematics
    Cumulative GPA: 3.50

President, *Weber State Physics Club,* Ogden, UT 2010 – 2012

Honor Roll, *Weber State University,* Ogden, UT

Eagle Scout, *Boy Scouts of America* 2006

Experience

Teacher, *Oak Canyon Junior High School/Lone Peak High School*, ASD, UT – January 2016 to Present
- Taught students on the subject matter of Secondary I Math and Precalculus, adhering to all state curriculum standards. Students demonstrated mastery of all core standards by end of year, with remediation available for students that needed additional assistance
- Collaborated with other teachers in departments, allowing for a unified coursework throughout the year to optimize student learning. Unified collaboration allowed for students in any classroom the opportunity to seek help from any certified instructor on campus

Math Aide, *Oak Canyon Junior High School,* Lindon, UT – January 2016
- Assisted students in learning core standards and principles, assisted with remediation of struggling students. Remediated students were able to rejoin current class lessons with minimal disruption of learning processes
- Assisted teachers in classroom management, helping maintain structure and order in classrooms which allowed teachers to better instruct students Worked one on one with teachers to better deepen my understanding of various techniques to help students learn, manage classrooms, and lesson planning

Coursework in Computational Physics, *Weber State University,* Ogden, UT – Fall 2012
- Studied the basics of computational physics and Python programming, emphasizing top down design and 3-dimensional programming
- Designed multiple programs both individually and in small groups, effectively completing assignments and coordinating more complex projects within the small groups, ensuring compatibility between various parts of program written by different individuals
- Individually wrote a sorting program to fetch data from a text file, compile said data into meaningful results, and displaying said results in easy to understand visual graphs. Said program analyzed various bullet types from one ammunition manufacturer for accuracy over distance as well as range, accounting for slight variations of wind speed and other external factors

Independent Research with University Fellowship, *Weber State University*, Ogden, UT – 2013
- Paid to research graphene capacitors with an emphasis on graphene formation. Created laser converted graphene using graphite solution on PET substrate. Used SEM to discover flaws created by both graphite solution deposition as well as by heat aberrations in PET substrate
- Authored grant to fund research and was given a personal department fellowship to conduct individual guided research on graphene capacitors
- Presented findings at Weber State University's research symposium

Research Assistant, *Weber State University*, Ogden, UT – Oct. 2012 – April 2013
- Acted as consulting research assistant for Storm Bowling to assist ongoing investigations on key material components
- Scanned material samples using AFM for surface deformations on curved surfaces, processing multiple images per sample while looking for overall net direction and depth of surface flaws

Professor Assistant, *Weber State University*, Ogden, UT – Sept. 2011 – December 2011
- Designed, constructed, and assisted in programming a circuit board for tornado generator, integrating a digital capacitive touch sensor controlled by microchip
- Worked hands on with professor during all steps of production of the circuit board, from formulation of design to final testing of completed board

Private Physics and Math Tutor, Ogden, UT – Jul. 2012 – Apr. 2014
- Taught students in concepts of both calculus and introductory level physics, focusing on visualizing concepts learned in class

Physics Lab Aide, *Weber State University*, Ogden, UT – Jan. 2011 – Apr. 2014
- Supervised and taught introductory physics lab students as professor's assistant with an emphasis on providing aide for any comprehension issues that arose

Coursework

Material investigation, optical physics, bounded partial differential equations, probability and statistics, physics of materials, electronic circuit design, electronics, quantum mechanics, classical mechanics, wave mechanics, electrodynamics, programming physical systems, special and general relativity, thermodynamics, linear algebra