

Amine Mohamed Oueslati

moueslat@berkeley.edu, (202)-459-3531, 2299 Piedmont Avenue, Apt#615, Berkeley, CA 94720

EDUCATION

University of California, Berkeley

M. Eng. Fung Institute for Engineering Leadership & Material Science and Engineering

GPA: 3.7

Berkeley, CA

Anticipated May 2016

University of Maryland, College Park

B.S., Material Science and Engineering, Specialization: Advanced Energy Systems

GPA: 3.76

College Park, MD

May 2015

PROJECT MANAGER EXPERIENCE

Lawrence Berkeley National Laboratory

Project Manager, Low Cost Disposable Battery for the Developing World (Project Numa)

Berkeley, CA

Fall 2015 – Present

Goal: Design, prototype and optimize a novel iron battery that can operate an LED and charge a mobile phone

- Lead materials selection, electrode engineering and hands on electrochemical testing
- Design an impermeable plastic housing that contains the cell and is compatible with a mildly corrosive solution
- Direct a market study and financial analysis on the commercialization of the battery
- Qualified and currently participating in the Big Ideas Competition at UC Berkeley

Capstone Design Competition, University of Maryland

Project Manager, Laser Induced Graphene Sponge

College Park, MD

Spring 2015

Goal: Design and prototype a new effective, economic and environmental material to clean up oil spills

- Lead the finite element computational modeling team to simulate oil sorption of Laser Induced Graphene
- Conducted lab scale experiment to evaluate samples fabricated by the renowned James M Tour group at Rice University
- Managed the finances of a team of five engineers and completed the project in 9 weeks meeting a budget of \$1000

Energy Research Center, University of Maryland

Project Manager, Shape Memory Paper

College Park, MD

Fall 2014 – Spring 2015

Goal: Design and prototype a new shape morphing composite that operates in dry environments at low currents

- Collaborated with Dr. Jinsong Tao to select the appropriate organic and metallic counterparts for the composite
- Conducted and documented various electrical and strain related tests to evaluate performance and reliability
- Research publication is currently under review

RESEARCH EXPERIENCE

Robert A. W. Carleton Lab, Columbia University

Research Assistant, Neutron Diffraction Stress Measurements in Suspension Bridge Wire Bundles

New York, NY

Summer 2014

Goal: Use neutron diffraction to understand the effects of mechanical interference of the outer wires on a broken central wire

- Developed an algorithm to synchronize and extrapolate force and strain data on a single time stamp
- Processed Stress-Strain data to analyze slipping behavior during neutron diffraction using Matlab
- Presented weekly reports involving findings, roadblocks and required experiments to advance algorithm development

Laboratory for Nanoparticle Based Manufacturing and Metrology, University of Maryland

Research Assistant, 3D and 2D Printing of Nanoenergetic Materials

College Park, MD

Fall 2013 – Spring 2014

Goal: Develop a printable nanothermite ink in order to increase thermite welding efficiency

- Assisted in customizing a Makerbot Replicator (3D Printer) to print liquids using an in-house pressure system
- Evaluated numerous formulations of inks using light microscopy and burning tests
- Presented a poster with printer design, printing data and burning properties on Undergraduate Research Day

OTHER EXPERIENCE

University of California, Berkeley

Finance Team Member, Berkeley Hyperloop Project

Berkeley, CA

Fall 2015 – Present

Goal: Raise \$500,000 for project development and compete in the SpaceX Hyperloop Pod competition

- Design sponsorship packages and directly communicate them with various company Human Resources departments
- Act as a technical liaison for potential investors in order to gather necessary social and financial support

Coleman Fung Institute for Engineering Leadership

Leader, Student Career Representative Team

Berkeley, CA

Fall 2015 – Present

Goal: Work closely with career services to help plan, communicate and implement career-related events

- Participate in Student Leadership Committee to organize student initiatives
- Act as liaison with potential employers and promote their workshop/event to the student body

SKILLS

Proficient in: Advanced manufacturing Modeling, Battery manufacturing and testing, 3D printing, Matlab, Microsoft Office, Arabic and French

Exposure to: LabView, Origin, AutoDesk, CAD, JAVA, Design of Experiments, R, Electrical and pneumatic circuit design, Statistical analysis

HONORS & GRANTS

- University of California, Berkeley College of Engineering Opportunity Grant
- Tau Beta Pi (National Engineering Honor Society)
- Alpha Sigma Mu (International Honor Society for Materials Science and Engineering)
- Dean's List & Academics Honors University of Maryland

INTERESTS/ACTIVITIES

Electric Vehicle Design, Battery design and packing, Smart grid development, Maryland Boxing Club, French tutor, Graduate Teacher Assistant