

Kevin Espinet

Chemical Engineer (EIT)

941-405-2217 | kbespinet@gmail.com | [LinkedIn](#)

University of California - Berkeley

Berkeley, CA

PhD Student in Chemical and Biomolecular Engineering

August 2020 - Present

- Graduate student accepted into highly prestigious university in the field of ChemE.
- Focus on studying thin film polymers used in proton exchange membranes using spectroscopy methods.
- Took PhD level courses in Thermodynamics, Transport Phenomena, Chemical Kinetics, and Teaching.

Lockheed Martin Missiles & Fire Control

Camden, AR

Chemical Engineer

April 2018 – July 2020

- Supported the manufacturing of ordnances and their components through application of Lean/6 σ and other methods as well as rework/repair of defects in accordance with company and military issued specifications. Focus areas include films, coatings, sprays, injection molding, polymer adhesives, and composite structures.
- Covered multiple manufacturing areas of Camden Operations including PAC-3 subassembly, special chemical process line, AUR missile assembly and coating, MSE canister assembly and coating, and THAAD canister build.
- Saved over \$1M on open contracts through process improvements such as: variation reduction in an injection molding process, reordering of tasks to save time and increase throughput, and pre-packaging chemical kits to mitigate waste and reduce mixing times.
- Accounted usage of over 200 chemicals sitewide and created a digital VBA tool to calculate minimum inventory requirements as a function of production rate, thus preventing shut-down as rates increase.
- Interfaced with contractors, wrote statements of work, and calculated economical viability for capital expenditure projects such as: the reconfiguring of coating spray robots and automated marking research.
- Performed root cause analyses of defects such as: the formation of balloon-sized bubbles on polyurea coatings, unworkably tacky solid-film adhesive, and corrosion of parts. Implemented solutions to address root cause.
- Assisted validation testing for the use of new materials and processes for production such as: a reformulated electromagnetic shielding coating and surface preparation for a polyurea coating.

UF's Integrated Product and Process Design (IPPD)

Gainesville, FL

Engineer Co-Op

August 2016 – May 2017

- Led a cross-discipline engineering team on a project optimizing Duke Energy's gas fired power plant.
- Improved power output by 1.5 MW through a \$2 million investment yielding \$700,000 per year return.
- Created technical engineering diagrams and models such as: a P&ID for a steam rerouting system, an optimization model for steam turbine sizing, a psychrometric calculator to find the mass of condensate produced by an air chiller with varying parameters, and the project's capital expenditure analysis.
- Authored design-reports and gave technical presentations to mixed audiences from both non-technical and technical backgrounds.

Estée Lauder Research and Development

Melville, NY

Chemical Engineer Intern

June 2015 – Aug 2015

- Formulated and designed several new products in a small-scale lab setting and assisted technicians and engineers with scale up of a shave cream in a 100 kg pilot setting.
- Designed and conducted experiments, such as: varying concentrations of different preservatives in a cream to eliminate microbe growth, and recreating a product with different types of waxes to vary texture.
- Conducted stability tests on lab samples, checking viscosity, smell, and color over many weeks at high temperature and/or high humidity.

University of Florida

Gainesville, FL

B.S. Chemical Engineering, Cum Laude

May 2017

B.M. Music Performance, Cum Laude

GPA (Overall) = 3.76

Minor in Mathematics