Trent Hinkle

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**Qualifications Profile**

Skilled and goal-oriented chemical engineering student with demonstrated success meeting complex requirements and supporting a broad range of operations. Seeking a position in scientific programming or computational science.

* **Research & Analysis:** Adept research abilities, tailoring strategies according to individual case needs. Astute analytical talents and ability to implement appropriate action. Experience conducting statistical analysis and data analysis on large datasets. Proficient at conducting data computations and algorithm development.
* **Science and Engineering:** Familiarity with Chemical Engineering, Numerical Analysis, Chemistry, Heat/Mass Transfer, Fluid Transport, Reactor Design, and Reaction Engineering. General understanding of Sequence Alignments, Proteins, DNA, and Biology/Biochemistry. Currently pursuing Master of Science in Chemical Engineering degree from UCLA. Possess chemistry lab experience, conducting experiments and running reactions and separations in chemistry.
* **Technological Experience:** Proficiencies includePython (SciPy, NumPy, GUI’s) and Mathematica, UNIX/Linux and Windows. Experience in parallel computing and High-Throughput computing using HTCondor. Knowledgeable with machine learning, deep learning, optimization, and statistical analysis. Understanding of Rosetta Software and PyMol. Proven ability to quickly learn and apply new methods and technology.
* **Key Strengths:** Dedication to clarity and consistency. Highly organized; **able to maintain an exceptional rate of productivity, accuracy, and efficiency within dynamic environments. Talent for forging relationships with colleagues, clients, and leadership to facilitate seamless operations.**

**Education**

**Master of Science in Chemical Engineering** (Anticipated Graduation: 6/2017)

University of California, Los Angeles, Los Angeles, CA

3.71 GPA

*Representative Coursework*: Thermodynamics, Mass Transfer, Chemical Reaction Engineering, Hydrogen, Applied Math for Chemical Engineers, Cryogenics

**Bachelor of Science in Applied Mathematics; Minor in Chemistry** (5/2015)

Fresno Pacific University, Fresno, CA

Summa Cum Laude Honors; 3.96 GPA

*Representative Coursework*: Organic Chemistry, Physical Chemistry, Fourier Analysis, Numerical Analysis

**Experience Highlights**

UCLA, Los Angeles, CA

***Graduate Researcher, Computational Protein Engineering, Romero Lab,*** 9/2015 to Present

Developed computational methods to design stable proteins using statistical models of protein energetics.

* Implemented statistics, machine learning, and optimization algorithms to design stable proteins with designed conformational transitions using Python, Unix/Linux, Rosetta, and HTcondor.
* Designed and developed secondary algorithms to reduce error in learning algorithms.
* Utilized Rosetta software and sequence alignments of Ubiquitin variants.

Naval Facilities Engineering & Expeditionary Warfare Center, Port Hueneme, CA

***General Engineer Intern,*** 6/2016 to 9/2016

Integral participant in the design, development, and testing of a statistical computer model based on Pareto Extreme Value methodology utilizing Python.

* Impacted the warfighting capabilities and safety of the United States Navy through the use of the statistical program by setting system limitations for the Improved Navy Lighterage System (INLS).
* Collaborated with engineers to ensure proper implementation of statistical program.

UCLA Mathematics Department, Los Angeles, CA

***Graduate Teaching Assistant,*** 9/2015 to 12/2015

Mentored undergraduate students during discussion sections, office hours, and tutoring, contributing to an increase in understanding of course material.

Mathematical Modeling of Controlled Drug Released, Advanced Mass Transfer, Los Angeles, CA

***Graduate Student – Academic Project,*** Winter 2015

Utilized mass transfer/diffusion equations to generate analytical time dependent models of mass transfer. Compared rate of mass transfer between various geometrics and empirical models.

Numerical Approximations to the Heat Equation, Fresno, CA

***Undergraduate Student – Academic Project,*** Spring 2015

Conducted an Independent project, describing and modeling the heat equation. Utilized finite difference approximations to model 2D heat transfer with Mathematica.

**Collegiate Athletics**

Fresno Pacific University, Fresno, CA, 2011 to 2015

***NCAA Division II Student Athlete - Baseball***

Practiced 25 to 35 hours per week, including weight lifting, attending meetings, study hall, team-building, and participating in community service engagements.

Fresno Pacific University, Fresno, CA, 2014

***Student Athlete on Campus Intern – Athlete Network***

Significantly contributed to the increase in student athletic involvement in professional career development. Ranked within the top 10% of interns for the company.

**Volunteer Service**

Sunnyside High School, Fresno, CA, 2011 to 2015

Mentored students with special needs, providing companionship and assistance with studies.

Butler Church, Fresco, CA, 2013 to 2015

Maintained yard landscaping, conducted general church housekeeping, and contributed to various property upgrades.