

DANIEL HE

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EDUCATION

The University of Texas at Austin Bachelor of Science, Chemical Engineering May 2018
Engineering Honors Program
Minor: Business Foundations Certificate
Overall GPA: 3.97 Major GPA: 3.96

Related Coursework – Transport Processes, Separation Processes, Engineering Economics, Accounting, Thermodynamics, Materials

EXPERIENCE

Eurecat U.S. – *Plant Engineer*; Houston, TX January 2016 – August 2016

Chemical catalyst regeneration and sulfiding company

- Managed regular operations of catalyst regeneration units R1 and R2, managing a shift of 11 operators/technicians each day
- Automated EPA Toxics Release Inventory reporting and data analysis using VBA code, 200 man-hours/year saved
- Designed and evaluated new process water piping project using AutoCAD, \$40k+ cost estimate reduction
- Developed operations and quality plans for new catalyst specifications and process conditions

Entech Engineering – *Environmental Consulting Intern*; Houston, TX May 2015 - August 2015

- Conducted engineering studies at 4 large Houston area chemical plants and presented environmental analyses to superiors
- Analyzed and applied environmental law to clients' situations and provided suggestions for improvement

ACADEMIC PROJECTS

Undergraduate Honors Research - Shape and Size Control of Anatase TiO₂ Nanocrystals – *Milliron Group* Fall 2016 - Present

- Hypothesized methods to vary crystal size by careful control of reactant concentrations and reaction time
- Utilized multiple analytical techniques such as X-ray diffraction and scanning electron microscope to characterize products

UT Austin Chem-E Car Team – *American Institute of Chemical Engineers* Fall 2014 – Spring 2015

- Collaborated in design of small scale car with reaction-fed hydrogen fuel-cell propulsion
- Identified safety and efficiency issues in testing phase and optimized chemical loading to increase output voltage by 40%

LEADERSHIP EXPERIENCE AND ACTIVITIES

Director of CLCC Youth Retreat – *Clear Lake Chinese Church* March 2016 – July 2016

- Coordinated 10 other leaders for retreat of 60 teenagers, and also led as emcee
- Taught leadership and teamwork skills to soon-to-be young adults, closely mentoring a smaller group of 6 high-schoolers
- Directly in charge of obtaining subsidies, equipment purchases, and task delegation, among other roles

Publicity Chair – Southwest AIChE Conference 2015 Spring 2015

- Registered 200 attendees from a dozen institutions through advertising campaigns and effective communication

Student Engineering Council Representative – Society of Asian Scientists & Engineers Fall 2015

- Organized SASE volunteers for engineering service days, such as ExploreUT and Introduce a girl to Engineering Day
- Won over \$2000 funding from UT sources for SASE professional events such as the South Central Regional Conference

HONORS & ACCOMPLISHMENTS

- AIChE Regional Conference Chem-E Car Poster Competition – 2nd Place Spring 2015
- Omega Chi Epsilon – Active, Tau Beta Pi – Active Fall 2015
- Virginia and Ernest Cockrell, Jr. Scholarship in Engineering – \$40k Fall 2014 – Spring 2018
- Software Eng. Team, Business Professionals of America – 1st Nationally Spring 2013
- Sanger Learning Center – Student Tutor Spring 2015 – Fall 2015

ADDITIONAL INFORMATION

Computer Skills: AutoCAD, VBA, Java, MS Word, Excel, PowerPoint

Languages: Working knowledge of Mandarin Chinese, Basic knowledge of Spanish

Service: Biweekly community service as Omega Chi Epsilon Honor Soc. Active and Tau Beta Pi Honor Soc. Active

Interests: Acapella, Cycling, NBA, Super Smash Brothers