BRAE WEEKLY

Engineering and Systems Management Support for Agriculture
The Weekly Newsletter for the BioResource and Agriculture Engineering Department

Week 3 ~ January 22nd, 2020

Cal Poly Opportunities
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BANQUET WORKSHOP
Jan 25th
9am BRAE LABS
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<th>Sunday</th>
<th>Monday</th>
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<td>NO SCHOOL</td>
<td>MONDAY SCHEDULE</td>
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<td>AES Barbecue BRAE Ramp 11-12</td>
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<td>Banquet Workshop Day</td>
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<td></td>
<td>Observe MLKJs Birthday</td>
<td>Santa Lucia Club Showcase 5-6pm</td>
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<td>AES Barbecue BRAE Ramp 11-12</td>
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<td>CAFES Council 5pm-6pm</td>
<td>AES General Meeting 6pm BRAE Lab 1</td>
<td>AES Barbecue BRAE Ramp 11-12</td>
<td>AES Career Fair 2020</td>
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<td>World AG Expo Cal Poly Day</td>
<td>AES Barbecue BRAE Ramp 11-12</td>
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Kent Norman is a fourth year BRAE student with an Agribusiness minor from Stockton, CA. He is involved in many of the Agricultural clubs on campus including Dairy Club and the Western Bonanza Junior Livestock Show. This year, Kent is the general manager of Western Bonanza, which is the largest student run livestock show on the west coast with over 5000 entries. As general manager, he heads the planning and executing of the show in addition to overseeing a team of five other managers and twenty-nine committee chairs. Kent is also responsible for inviting of guest speakers and planning various activities for the Western Bonanza class (ASCI 212). Outside of managing Bonanza, Kent works as a student employee at the Irrigation Training and Research Center (ITRC). At the ITRC, Kent’s daily duties include working on flume designs, sizing turnout gates and cross-regulating structures. He has also completed other jobs like working on research projects and running the Irrigation Turnout Calibration Unit (ITCU), which required him to travel around the state checking the accuracies of water district’s turnout flow measurements. While at Cal Poly, kent has completed two internships: working for ProTree Nursery in Brentwood, CA and working at Banta-Carbona Irrigation District in Tracy, CA. Both provided a variety of jobs for him to complete and were very educational. At the end of Spring Quarter 2020, Kent will be graduating from Cal Poly, SLO. Kent already has accepted a job for after school at Central Irrigation, an on-farm irrigation design company in Merced, CA.
CAL POLY AES
Agricultural Engineering Society

**WHO:** Cal Poly BRAE & ASM Major Concentration (all majors welcome)

**WHAT:** A professional club that promotes experience in industry as well as developing connections with industry professionals

**WHEN:** Next Monthly Meeting: February 5th, 2020

**WHERE:** BRAE Lab 1

**WHY:** To give professional opportunities to Cal Poly students by allowing them to associate with industry professionals as well as another learning outlet to discover the variety of career paths they can take with their major

**HOW:** By being present and engaged, and enjoying a great BBQ!, Cal Poly Students will have access to more personalized information about their future within the Cal Poly BRAE Department as well as their career following college

AES Intramural Football
7:30 Jan 21st @Turf Fields
AES
Career Fair 2020
Current Company List & Growing

Wonderful Pistachios & Almonds
E. & J. Gallo Winery
AIM
Lyles Utility Construction LLC
Goodfellow Bros.
HCL Machine Works, INC.
USDA Natural Resources Conservation Service
Ochard Machinery Corporation
Semitropic Water Storage District
Teach Ag California
Andros Engineering
Hartman Engineering
Baloian Farms
Heinzen
4 Creeks
Pacific Ag Rentals
GEI Consultants
Sensient Natural Ingredients LLC
Stockton East Water District
Granite Construction
Speedling Nurseries
Willitts Pump
YCFCWCD
Topcon
Nichols Farms
Preston Pipelines
Priva
GeoVisual Analytics
Fresno Irrigation District
IDC Precision Irrigation
Guntert & Zimmerman
Cal Portland
Cannon
Peace Corps
Kiewit
U.S. Irrigation
JG Boswell
BRAE BANQUET Workshop

January 25th, 9am
BRAE Labs

Join AES in fabricating Auction Items for the 2020 BRAE Banquet. At the workshop students will have free reign to design and fabricate projects to be auctioned as a fundraiser for the club!
BRAE is offering FREE Tutoring

Standard Tutoring Times:
Monday, Wed, Fri from 6pm to 9pm.
Tuesday-Thursday from 2pm to 5pm.
Saturday from 1pm to 5pm.

Additional times by appointment
I may not be on campus if nobody requested my presence as this is technically a 10 hour a week job (not 19), but will come immediately if you send an email or give a call. I have so many hours that I keep open because I want to help as many of you as possible. Its good to RSVP and let me know what you want to study and when. If the material is digital, send me a copy; if its a physical book, bring it with you.

Classes offered: Calculus, Physics, Statics, Statistics, Chemistry, Dynamics

CONTACT
My phone number is 559 940 5215 and will also work for Signal and WhatsApp.
My emails are jwoodrin@calpoly.edu and woodring.josh94@gmail.com

Josh Woodring
Internship and Employment Opportunities

ASM and BRAE students and graduates are in high demand!

Check out [www.brae.calpoly.edu/students/employment](http://www.brae.calpoly.edu/students/employment) for even more postings!

Career Services can help you explore career options, prepare for your internship/job search, connect with employers, and more! Please visit their website for information on the services and resources they provide.

### THE WINTER CAREER FAIR

**January 22 & 23 | 9:30am - 2:30pm | REC Center**

#### 1/28: Resume & Cover Letter Office Hours
Drop by the second floor of the library anytime between 6:00 - 7:00 PM to have your resume or cover letter reviewed by Career Services!

#### 1/28: Job/Internship Search Lab
Are you ready to start searching for a great job or internship? Do you have ideas, but aren't sure where to start? We're here to help!

#### 1/28: Making the Most of the CM Career Fair
This workshop will help you be more confident by sharing what to do before, during and after the CM Career Fair to be a standout candidate.

#### 1/27: Construction Management Resume Drop-in
Ever wonder what employers look for in resumes and how you can stand out from other applicants?

#### 1/24: Graphic Communication Winter Career Day
This is a great opportunity to network with and interview with employers hiring Cal Poly students experienced in various artistic mediums.

#### 1/23: Cal Poly 2020 Winter Career Fair - Day 2
Whether you are in your first year and want to explore how it all works, or you are about to graduate & need a full time position, this events for you

#### 1/22: Siemens Information Session
Attend this session to learn more about career opportunities with industrial manufacturing company, Siemens.

#### 1/22: 2020 Student-Employer Diversity Mixer
This event offers students from diverse and underrepresented backgrounds the chance to connect with employers!
Job Description
The Cal Poly Dairy is a progressive, 540 head dairy farm located in the heart of Cal Poly's large swath of agricultural land. Our heard boasts an average of 94.4 Lbs of Milk per day, 3.87% fat and 3.27% protein, with a somatic cell count of 92,000. We are entirely student run, with 33 student employees from upper management down to entry level milkers. We currently milk 224 cattle twice a day, 112 Holstein Cows and 112 Jersey Cows. The dairy raises its own young stock, grows some feed and process 10% of our milk at the creamery located within the dairy science complex.

We are looking for an individual to join our Maintenance Department. The Maintenance department is responsible for maintaining and improving the hydraulic, pneumatic, plumbing and electrical systems on the farm. We also maintain the fleet of heavy equipment, trucks, tractors and are responsible for cattle bedding and manure management.

What You’ll Do
- Operate a wide array of heavy equipment, including Wheel Loaders, Forklifts, Skidsteers, Skip Loaders, Ag Tractors, Dump Trucks, and more.
- Grease, Lubricate, Fuel and Maintain heavy equipment and trucks
- Diagnose and repair issues relating to hydraulics, electrical, plumbing and more
- Repair and construct infrastructure related to carpentry, concrete, and welding.
- Remove and replace bedding for lactating cows, heifers and calves
- Work alongside other dairy employees, subcontractors, Cal Poly Agricultural Operations staff and Cal Poly Animal Science Staff

What We Are Looking For
- A detail oriented team player with a positive attitude and safe working habits.
- Heavy Equipment Experience Preferred, but not required.
- Extensive knowledge of hand tools and power tools required.
- Personal tools required.
- Experience working with cattle Preferred, but not required.

Wages and Benefits
- Flexible Scheduling
- 13$ / Hour paid every two weeks
- Opportunity for promotion and growth
- Valuable skills and knowledge that cannot be learned in class
- Housing Opportunities Available
- A safe and Positive work environment

Contact
Gavin Abraham, Maintenance Manager gjabraha@calpoly.edu, 310-913-8130
**Why Gallo?**

Named a Glassdoor "Best Places to Work" three years in row, we couldn’t be prouder of our company culture. As the largest family-owned winery in the world with over 100+ unique wine and spirits brands, our products are synonymous with life's special occasions. Come celebrate with us! Your Talent & Gallo | A Perfect Pairing

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**Process Technology Description**

E&J Gallo is a world-class research and manufacturing organization. This internship provides the opportunity to conduct cutting-edge Research & Development projects in both the laboratory and winery setting. You will work side-by-side with professional technology managers, gaining valuable hands-on expertise in a variety of aspects of winery operation.

The Process Technology Internship Program for Scientists is searching for appropriate candidates to fill the 6 month positions within our Process Technology Department. Interns will assist in the development and scale-up of new technologies for the Winery. Interns working on technology projects will assist in managing a portion of an ongoing development project. This is an excellent opportunity to gain hands-on experience in a lab or production environment and increase your skill base for future employment or graduate school.

Interns will work with cross-functional teams, including operations, winemaking, engineering and operators to execute technology projects that are undertaken during the harvest season.

**FOR MORE INFORMATION:** [https://tinyurl.com/PTScientists2020](https://tinyurl.com/PTScientists2020)

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**Process Technology Description**

The E&J Gallo wineries located in Livingston, Modesto, and Fresno are world-class centers for the production of domestic and international wines. This internship provides the opportunity to work within one of these facilities and partner closely with a cross-functional team to execute Engineering projects during the grape harvest. Interns will have the opportunity to work alongside professional technology managers, gaining valuable hands-on expertise in a variety of areas at the Winery.

The Process Technology Development Internship Program for Engineers is searching for appropriate candidates to fill 6 month positions within our Process Technology Department. Interns will work with cross-functional teams, including operations, winemaking, engineering and operators to execute technology projects that are undertaken during the harvest season. This is an excellent opportunity to gain hands-on experience in a lab or production environment and increase your skill base for future employment or graduate school. Working closely with cross-functional teams, interns’ essential functions are as follows:

- Assist in the development and scale-up of new technologies for the Winery.
- Participate in technology projects and assist in managing a portion of an ongoing development project.

**FOR MORE INFORMATION:** [https://tinyurl.com/PTEngineering2020](https://tinyurl.com/PTEngineering2020)
Job Summary
We are currently searching for appropriate candidates to fill 6-month positions (April – September (Paso Robles) or June – December) within our Winegrowing Operations. Coastal Winegrowing/Gallo Vineyards Inc. strives to produce the highest quality wine grapes using technologically advanced production techniques. Interns will support the many different areas of our Winegrowing Operations including general viticulture, irrigation management, pest control, tractor and spray operations, new equipment development and cultural operations. Some of the intern's essential functions could include the following:
• Support all GVI operations and viticulture winegrowing practices.
• Assist with crop estimations, phenology data collection and irrigation practices.
• Assist with harvest activities including maturity sampling, harvest equipment preparation and quality control of mechanically and hand-harvested fruit.
• Participate in pest and disease scouting and help draft treatment thresholds for specific pests.
• Support GVI in logistical allocation of assets.
• Use GPS technology and the Geographical Information System to implement precision farming and map vineyard infrastructure.
• Assist with the design, layout, and planting of a new vineyard block.

FOR MORE INFORMATION: https://tinyurl.com/GVI2020

Job Summary
We are currently searching for appropriate candidates to fill a technical 6 month position (May – January) within our Gallo Vineyards Inc. An Intern will learn and apply engineering research analytics, designs, project management, and construction skills under the guidance of an experienced Technical Team Lead. Interns will also have the opportunity to utilize engineering studies and modeling to determine future agriculture needs of our vineyards. Potential essential functions an Intern could participate in are:
• Performs calculations and assists in research, design, and build of agricultural engineering solutions.
• Contributes to increasing data collection technology and agricultural automation.
• Contributes to managing and designing projects, developing engineering estimates, budgets and construction inspection.
• Investigates products and generates reports for specific applications.
• Assist in performing process management analysis to improve processes.
• Assists in providing engineering designs and construction for various projects involving machinery, water, energy and soil.
• Coordinates with customers and gains consensus on project design and construction.
• Plans and develops experimental test programs, analyzes test data and reports to determine feasibility.
• Gathers and analyzes data to determine feasibility of product proposal.
• Collects, enters, organizes and uses GIS data.

FOR MORE INFORMATION: https://tinyurl.com/TECHGVI20
Job Summary
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FOR MORE INFORMATION: [https://tinyurl.com/PBUOps2020](https://tinyurl.com/PBUOps2020)
Join our Agriculture, Construction, or Positioning Team

topconpositioning.com/internship
topconcareers@topcon.com
Build Your Career

Our interns are the future of Topcon! Interns are mentored by the most talented in the industry. Network with executives, directors, managers and other Topcon employees. We have unique opportunities for the brightest and most talented undergrad and graduate students who are enterprising and take charge of their career path. If you are open to new ideas and embrace Topcon’s values of passion, ownership, unity, and achievement, then we want to hear from you!

About Topcon

Topcon’s construction business provides world leading, highly advanced positioning products by incorporating innovative technologies such as leading-edge GPS, laser and image analysis technologies based on the optical technology Topcon has fostered since its beginning.

Topcon’s positioning business is globally expanding high-precision GNSS (Global Navigation Satellite Systems) business, including GNSS surveying, machine control and precision agriculture.

Topcon’s precision agriculture business solutions help farming industry businesses connect their business operations in real time for data-driven profitability and sustainability, by providing cutting edge technology and products.

Career and Internship Opportunities
Topcon has openings in the following disciplines:

- Agriculture Engineering
- Civil Engineering
- Computer Science
- Construction
- Geomatics
- GNSS Technology
- Industrial Engineering
- Information Technology
- Mechanical Engineering
- Precision Agriculture
- Surveying

To Learn More
Meet with Topcon Representatives at the BRAE Career Fair!

February 6, 2020 at the Cal Poly Farm Shop

topconpositioning.com/internship