AES DONATIONS

AES makes donations to the SLO Food Bank and the Cal Poly University Police Department
Alan Isaacson is a fourth year BRAE major from Woodland, California. While he was growing up, he was always eager to find a project and get his hands dirty. He fixed and restored many things such as an old Willys Jeep. These projects sparked his passion in engineering. Additionally, he grew up on a small ranch where he got involved in 4-H and FFA creating his other love: agriculture. Alan has been able to combine his affinity for engineering and agriculture through the BRAE program.

Alan has been involved in a number of things over the years. Through FFA, he has earned his American Degree and was the FFA State Farm Champion. He is an Eagle Scout for the Boy Scouts of America and has an NRA Expert Marksman qualification.

At Cal Poly, Alan has also has been very involved! He is the Cal Poly Animal Nutrition Center Student Manager and HACCP Coordinator. In our department, he served as the AES President last year, and is the current Tractor Pull Club President. In fact, he wanted to make sure everyone knows that the Tractor Pull Club is always looking for more club members! Their meetings are in 8-122 at 7pm every Tuesday.

Alan shares that Dr. Zohns has had the biggest influence in his time here at Cal Poly. “Dr. Zohns has taught me how approach a problem logically and thoroughly,” Alan said.

When he is working alongside Gary and Dr. Zohns, he enjoys when the two have opposite opinions that result in a “class act discussion,” but it always works out in the end.

Picking a favorite class is hard, but Alan has most enjoyed the 421/422 series taught by Dr. Zohns. “I finally get to put my engineering education to good use and fully utilize Shop 6 and 7... Oh yeah, and because the guy that teaches the class is pretty awesome!” Alan said.

Alan encourages everyone to get involved and learn outside of the classroom. Thanks to his experience gained at Cal Poly, he hopes to have a job designing and building farm equipment and machinery after graduation… maybe in Germany!
AES Donates to SLO Food Bank

AES made a donation to the SLO County Food Bank that will provide $5000 worth of food to the community.

Thank you to this club for your generosity.

Photo by SLO County Food Bank

AES Donates to UPD

AES recently donated $500 to the University Police Department. This money in intended to help the department launch a K9 Unit at Cal Poly.

Congratulations to this club and thank you for giving back to Cal Poly.

Photo by CAFES

Cal Poly Rose Float returns to SLO

“The entire float frame is parked on the San Luis Obispo campus. In a few days, a group of students will start on a project to modify the front of the float, including narrowing the wheelbase and lengthen the front to allow for lower profile float designs. Thanks to the Cal Poly BioResource and Agricultural Engineering Department and Gary Weisenberger for making this possible!”

–Picture & Quote from Cal Poly Rose Float’s Facebook page
BRAE NEWS & EVENTS

Volunteer for Open House 2016!
They need your help! First meeting is at 7:00-8:00 am Wednesday, January 27th in 10-206
Available Committees: Food, Farm Store, Students, Alumni Relations, Ag Pavilion, Community Service, Parents, Safety, BBQ
Additional Meeting Dates: 2/17, 2/24, 3/9, 4/6, 4/13, 4/20

Society of Women Engineers
SWE Midterm Study Session
Wednesday, January 27th at 7:00 PM in Bonderson 104
Come to the SWE Midterm Study Session to study with your fellow SWE members, take a break from midterms, and take a look at the test bank for more material to study from! There will be awesome sweets to get your brain going for midterms! Happy Studying!
Test Bank Drive
Weeks 3-6 (January 18th to February 8th) SWE Office (197-212)
Got any exams from last year? Come to the SWE office and turn them in for points. The more points you have, the more chances for you winning some awesome SWE swag!
4th Grade Days
Tuesday to Friday, February 23-26 at various times Various Local Elementary Schools
Celebrate National Engineering Week, February 23rd through 26th, by going to local fourth grade classrooms to teach the students about engineering and conduct a fun, engaging, hands-on engineering activity. Visits will last around an hour excluding travel time. This is a fun way to reach out to our community and inspire kids to explore engineering!

Engineers Without Borders
India: Bldg 22-211, Monday from 7-9pm*
Malawi: Bldg 8-121, Monday from 7-9pm*
Nicaragua: Bldg 10-223, Monday from 7-9pm*
Thailand: Bldg 10-126, Monday from 7-9pm*
Local Projects: Bldg 22-312, Monday from 7-9pm*
IMPACT: Library 216M, Tuesday from 6-8pm
Fundraising: Library 216M, Thursday from 5-6pm
It’s not too late to become an EWB member! First, become an EWB-USA member here. Then attend the Monday night project meeting or next week’s general meeting, and let an officer know you would like to become a member. The cost is $20 for freshman/$25 for others and includes a sweet EWB t-shirt!
CIE’s Social Entrepreneurship Forum
The Cal Poly Center for Innovation & Entrepreneurship will be hosting a forum that showcases Cal Poly clubs and local non-profits utilizing entrepreneurial business techniques to make a social impact. Attendees will be able to “invest” in their favorite organizations, and the winning organization will receive $500. The event is next Monday, February 1st from 4:30-7pm and admission is free but limited.
SAFETY TIP OF THE WEEK

Safety Tip of the Week
Beware of Hot Metal

When working in the labs, always be mindful of the presence of hot metal. This may include chips or shavings from the machines, recently welded material, and grinder sparks. Hot metal can not only cause serious injury, but can also start fires. Be mindful of your surroundings when working with hot metal or near someone who is. Remember: metal retains its heat for a long time and can remain hot long after someone walks away from it.

Be aware of the following:

- Never leave a heat source unattended
- Be mindful of hot metal chips when working on the lathe or mill
- DO NOT remove chips from the lathe or mill with your bare hands
- Be careful of hot metal and work area when welding
- DON’T USE GLOVES to pick up hot metal – use pliers or tongs
- Be mindful of hot sparks from grinding – sparks can cause fires
- Assume that all metal in the shop is potentially HOT!!!
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<td>Classes Start</td>
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POSITION DESCRIPTION
POSITION: Design Engineer (Electrical)
REPORTS TO: Engineering Manager
SALARY RANGE: $24-30 per hour

PURPOSE: The focus of this entry level position is to design industrial electrical control systems for use in the automation of machine or process control systems and includes conceptual design, layout and troubleshooting. Typical systems will include a variety of Programmable Logic Controllers, variable frequency drives, field instruments, and operator interface devices.

ENVIRONMENT: Industrial Control and Design, Inc. celebrates over 20 years as a progressive industrial automation integrator. Specializing in the engineering, design and programming of industrial automation systems for agriculture, municipal, and other industries, iCAD provides advanced control systems using proven state-of-the-art technology and innovative designs, coupled with a distinctive customer-focused approach, to enhance customers’ competitive strengths through improved quality productivity.

The following is a list of major duties and responsibilities for this position along with certain supportive duties. It is not all-inclusive. Other duties and responsibilities may be added as needed and in addition, management, as appropriate, may modify this job description.

ESSENTIAL DUTIES AND RESPONSIBILITIES:
1) Become proficient in the following areas:
   Electrical Schematic Design;
   CAD Drawings;
   Industrial control component fundamentals;
   Electrical Control System Construction;
   Research and engineering of system requirements;
   Component Investigations;
   Design of component layout;
   Troubleshooting existing control systems;
   Cost estimating
2) Collaborate with Project Engineers and customers on potential and current projects as well as diagnosing and trouble-shooting existing installations.
3) Conduct field start-up and debugging of systems and equipment.
4) Develop test procedures and perform testing of equipment to verify technical adequacy.
5) Collaborate with senior engineers in developing concepts for next generation applications and respective testing systems.
6) Develop electrical schematic designs and manufacturing drawings per Engineers instructions and to meet customer requirements.
7) Order components based on specifications.
8) Conduct and analyze systems shop testing before installation.
9) Specify system components or direct modifications of product to ensure conformance with engineering design and performance specifications.
10) Research and analyze customer design proposals, specifications, manuals, and other data to evaluate the feasibility, cost, and maintenance requirements of designs or applications.
11) Confer with system engineers and other personnel to implement operating procedures, resolve system malfunctions, and provide technical information.
12) Oversee technicians in construction of developed systems.
13) Comply with the National Electric Code compliance guidelines.
14) Comply with the UL 508A certification compliance guidelines.
15) Follow all human resource policies and procedures, and contribute to an environment that appreciates diversity and treats all people with respect, prohibiting discrimination and harassment of any kind.
16) Comply with all safety, health and environmental policies, procedures and regulations.

Contact Joel Ratto @ 559-274-8159 or jratto@icadautomation.com
Company Interviews

During winter quarter, there is a long list of companies coming to Cal Poly to hold on campus interviews at career services.

Below is a list of the companies and positions available for BRAE and ASM majors. All of these companies are looking to fill full time job positions, not internships.

AECOM Technology Corporation:
   Wastewater Engineer

Light River Technologies:
   Field Engineer

Ted Jacob Engineering Group:
   Mechanical HVAC Design Engineer

Sheathing Technologies:
   Mechanical and/or Mechatronics Automation Engineer

Enginpro:
   Field Automation Engineer

For a full list of companies and more information contact:

Amie Hammond
Career Counselor
Career Services
805-756-5977
The Farm Bureau of San Diego County is committed to assisting students to complete their education in agriculture/ horticulture or a closely related field. Each year scholarships are awarded to worthy students. Primary criteria for awards are career goals, work experience, financial need, grades and written expression. Secondary criteria are extracurricular activities and academic honors.

**Eligibility requirements:**

Any student entering or attending a two-year or four-year college or university is eligible. Applicants must be pursuing a course of study in agriculture/horticulture or a closely related field, and they **must have a permanent residence in San Diego County.** Membership in the Farm Bureau is not required.

**General Information:**

Scholarship award amounts have ranged from $500 to $5000 in past years. Funds awarded in 2016 must be applied to the 2016-2017 academic year. Each student who wins a scholarship will be notified by mail.

Scholarship awards will be based on information provided in the completed application form. Previous applicants and former scholarship recipients may re-apply in future years by submitting an updated application, transcript, and recommendations.

Scholarship funds will be deposited at the educational institution in the recipient’s name and applied by that institution to the student’s expenses.

**Required Supporting Documents:**

1. A recommendation from a teacher/academic advisor at your school evaluating you as a student *(please use enclosed form).* A recommendation from a parent is not acceptable. The teacher or applicant should mail or fax the completed form to the Farm Bureau office.*

2. A recommendation from a current or former employer or community service organization evaluating you as a worker or volunteer *(please use enclosed form).* A recommendation from a parent is not acceptable. The recommender or applicant should mail or fax the completed form to the Farm Bureau office.*

3. A transcript of grades from your most recent school. Grade point average must be calculated to a 4.0 scale. Photocopies are acceptable. Include transcript with completed application form.*

**Deadline:**

Applications must include responses to all essay questions and be postmarked by **April 4, 2016.**

If mailing please use a large envelope, if possible, to avoid folding.

**Preferred Method**

Email PDF form to: kathy@sdfarmbureau.org
(recommendations and transcripts can be sent by post)

**Mail to: Scholarship Application**

San Diego County Farm Bureau
1670 East Valley Parkway
Escondido, CA 92027-2409

*Your application will not be considered complete without one recommendation from a teacher/academic advisor and one employer recommendation and a transcript of your grades. Please call (760) 745-3023 if you have any questions or would like to confirm that Farm Bureau has received your application and supporting documents.*
STUDENT OPPORTUNITIES

2016 CAFES Open House

We Need You!

Food
Ag Pavilion
Community Service
Parents
Safety
BBQ

Farm Store
Students
Alumni Relations

Which committee will you choose?

Come find out what it’s all about at the NEXT meeting:
7:00 am – 8:00 am Wednesday, January 27
LOCATION 10-206

Additional Mandatory Meetings: February 17 and 24
March 9 and 30 ~ April 6, 13, and 20