**2018 Global Engineering Internship (GEI) Program**

**School of Engineering, Stanford University**

The Stanford School of Engineering offers Global Engineering Programs that are designed to enhance engineering education by providing undergraduate and graduate students with opportunities to have an immersive experience in culturally diverse and international environment. We do this, in part, because we understand that engineers are expected to work globally and we want to prepare our students appropriately.

We have been running the Global Engineering Internship (GEI) Program since 2009. The program provides students with an opportunity to learn about China and India's rapidly expanding role in global business and technology and to gain real-world work experience in a culturally diverse environment. More than 50 companies have hosted our interns in a dozen cities in China and India such as Beijing, Shanghai, Shenzhen, Bangalore and Pune. The hosting organizations range from multinational to local companies, from giant corporations to small start-ups. In an effort to serve as many Stanford students as possible, we strive to cover a wide range of engineering fields including Aeronautics and Astronautics, Bioengineering, Chemical Engineering, Civil and Environmental Engineering, Computer Science, Electrical Engineering, Management Science and Engineering, Materials Science and Engineering, Mechanical Engineering, and Product Design.  Both undergraduate and graduate students are eligible for this program.

These are intended to be paid internships, although we convey to students upfront that the pay will not compete with Silicon Valley companies.  We ask that the pay provide enough so that students can live comfortably, travel a small amount (on weekends), and be safe.  In many cases, companies provide housing as part of the package.  In some cases, they also cover airfare.

Below is our process and timeline for the 2018 GEI Program:

*November 2017:*  Companies provide position descriptions to Stanford, which we post on our website.  These describe the company, the position, the required skills/qualifications, housing, etc.

*December 2017/January 2018:*  Students apply through our program website to the positions in which they have an interest.

*February 2018:* A committee composed of faculty and the internship program staff interview students and determines who to nominate for each position.  We do this based on fit for the position as well as confidence that the student will be a good ambassador for Stanford and be able to fare well in an overseas internship.  We then send each student’s materials (application, resume, letter of recommendation, transcript, etc.) to the company to which we are nominating that student.  We nominate only one student for each position to provide better coverage across positions.

*Early-mid March 2018:*  Companies have approximately 2-3 weeks to decide if they will accept the student we have nominated, including the option to conduct an interview with the student.

*Late March 2018:*  If the nomination is accepted, the student is then given a few days to accept or decline the offer.  Note:  We work hard at every stage to ensure that students only get to this point if they are sincerely interested, but we still get attrition at this point because students are often choosing between several attractive offers.

*April-May 2018:*  We work with students and companies on travel arrangement, vaccination/shots, visa application, orientations, etc. in preparation for the students’ departure.

*Late June – Early September, 2018:*  Students work as interns. We ask students to commit to work full time and complete the entire 11 weeks of the internship program.

Attached please find a position description form for interested hosting organizations to fill. If you have any questions, please feel free to contact [ming@stanford.edu](mailto:ming@stanford.edu).

**2018 Stanford Global Engineering Internship Job Description Form**

If your organization is interested in hosting a Stanford University intern for the summer of 2018, please complete this form to the best of your ability. We understand you may not have a definite description of internship job duties, but providing as much complete information as you can will help us identify the most suitable candidate for your organization. Please email the completed form to Ming Luo at <ming@stanford.edu> by Nov 30, 2017.

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| *Host Company* will assign a work mentor to the intern.  *Host Company* will provide documentation needed to assist the student’s visa application process.  *Host Company* reserves the right to ask the student to sign a confidentiality agreement prior to providing the visa supporting documents.  *Host Company* also agrees in good faith to assist the intern in the event of a medical or other emergency. (There will be no financial responsibility on the part of the host organization). | | | | | | | | | |
| **Host Company:** | | Zhejiang University | | | | | | | |
| **Website:** | | http://www.zju.edu.cn/ | | | | | | | |
| **Brief organization profile:**  Include size of organization, industry, current endeavors, and competitive edge. | | Zhejiang University is a comprehensive research university with distinctive features and a national as well as international impact. Research at Zhejiang University spans 12 academic disciplines, covering philosophy, economics, law, education, literature, history, art, science, engineering, agriculture, medicine, management and etc. With 7 faculties and 36 colleges/schools/depterment, 1 polytechnic Institute, Zhejiang University has 14 primary and 21 secondary national leading academic disciplines.  As of Dec. 2016, there are a total of 48,762 full-time students enrolled at Zhejiang University, including approximately 15,092 graduate students, 9,537 Ph.D candidates, and 24,133 undergraduates. In addition, there are about 6,237 international students currently attending Zhejiang University.  According to the data released by ESI, as of January 2017, Zhejiang University has 18 disciplines entering the world’s top 1% of the academic institutions’. There are 7 disciplines entering the world's top 100, ranking 2 in the Universities of China. There are 6 disciplines entering the world’s top 1 per thousand, and 4 disciplines entering the world's top 50, ranking 1 in the universities of China. | | | | | | | |
| **City:** | | Hangzhou | | | | | | | |
| **Contact person name & title:** | | Hua-xin Peng. Professor. | | | | | | | |
| **Email Address:** | | hxpengwork@zju.edu.cn | | | | | | | |
| **Office Telephone:** | | +86-571-87953052 | | | | | | | |
| **Cell Phone:** | | +86(0)13738006020 | | | | | | | |
| **Fax:** | | +86-571-88981358 | | | | | | | |
| **Office Address:** | | 38 Zheda Road., Xihu district, Hangzhou , Zhejiang Province, P. R. China 310027 | | | | | | | |
| **Number of Position(s):**  For each position, please provide the job description, desired qualification, language requirement, etc. You can either duplicate the relevant sections below, or fill a separate form for each position. | | 1 research assistant position:  Duty: conduct experiments with the guide of PG students; analyze the data and write experimental reports.  Qualification: students majored in materials science, chemistry and physics, school of engineering,  Language requirements: English | | | | | | | |
| **Work Hours:**  (e.g., Five days a week, June 25 – September 7, 2018) | | Five days a week, June 25 – September 7, 2018 | | | | | | | |
| **Housing availability?** | | √ Yes | Details: student accommodation | | | | | | |
| □ No |  | | | | | | |
| **Monthly intern stipend:** | | 1000 rmb | | | | | | | |
| **Round-trip flight tickets?** | | √ Yes □ No | | | | | | | |
| **Dress code:** | | Casual. Follow the lab rules | | | | | | | |
| **Department:** | | Institute for Composites Science Innovation. School of Materials Science and Engineering | | | | | | | |
| **Department Profile:** | | The School of Materials Science and Engineering at Zhejiang University was first founded in 1978, which is one of the earliest organizations devoted to research and education in materials science and engineering in China. The School of Materials Science & Engineering consists of six institutes and one center, including Semiconductor Materials Institute, Metal Materials Institute, Inorganic Nonmetallic Materials Institute, Materials Physics Institute, Institute for Composite Science Innovation, Institute of High-Temperature Alloys and the Center of Electron Microscopy. The School also hosts a series of high-level research platforms, including the State Key Laboratory of Silicon Materials, the Research Center of Ministry of Education for Inorganic Functional Materials for Surface and Structure Modification, the Provincial Electron Microscopy Centre, the Key Laboratory of Advanced Materials and Applications for Batteries of Zhejiang Province and Zhejiang Provincial Key Lab of Novel Materials for Information Technology. The School has established global academic reputation and influence in the fields of materials micro and nano structures, information materials, energy materials, advanced structural materials and biomedical materials etc. For the category of materials science, the School is ranked No.9th among all the single universities in the world according to the ESI citation report in Nov.2017, and is ranked No.22nd according to the U.S. News & World Report. | | | | | | | |
| **Departmental contact person name and title:**  Please indicate if this person will be the mentor/ supervisor | | Ms. Yangyang  Secretary of Institute for Composites Science Innovation | | | | | | | |
| **Email Address:** | | yangyangcoco@zju.edu.cn | | | | | | | |
| **Office Telephone:** | | +86-571-87953052 | | | | | | | |
| **Cell Phone:** | | +86(0)18757126422 | | | | | | | |
| **Work description:**  Please indicate details of the work the intern may be expected to perform during summer 2018. Please be as descriptive as possible. Our experience tells us the students work the best with specific projects. | | Metamaterials have attracted tremendous interest in the research community because they act strangely in the electromagnetic fields. Incorporating metamaterial properties into composite materials will enable a range of high technologies for aerospace applications such as radio frequency cloaking, microwave sensing, structural health monitoring, etc. Applicants interested in the intern are expected to contribute to this exciting field by absorbing knowledge in the design of meta-composites and getting involved in relevant lab work, i.e. manufacture skills of aerospace-graded fibre reinforced composites. Applicants will also be demonstrated with negative refractive indices in the electromagnetic radiation which link to why they are useful for industrial applications. The programme will engage in materials science, applied physics, composite engineering together with preliminary characterizations of the composite materials. | | | | | | | |
| **Intern qualifications:**  Please describe the required or desirable skills, education, personality, or other qualities you feel would best fit the position and your organization’s needs. | | The successful applicants will ideally have graduated (or be due to graduate) with an undergraduate degree. Undergraduate applicants are encouraged to apply for the intern but should have relevant lab experience. The applicants will join a large, well established research group and will require good inter-personal and networking skills for research interactions. Aptitude for experimentation is also required in the manufacture of composite materials. | | | | | | | |
| **Desired intern seniority** | | □Undergraduate □Graduate √ Either | | | | | | | |
| **Foreign language (other than English) level needed**  **(please check one):** | √ | Not needed, can perform job with minimum language skills | | □ | Basic reading, writing, and speaking  (one-year level at Stanford) | □ | Intermediate reading, writing, and speaking  (two-year level at Stanford) | □ | High levels of fluency needed in reading, writing, and speaking  (three-year level and above) |
| **Additional comments:**  Please indicate if you have other particular wish, concern, consideration or plan about the program. (e.g., multiple interns working as a team, long-term recruit, etc.)  Please also let us know anything special about your company’s positions & culture (e.g., long hours, travel involved, diversified culture, etc.) |  | | | | | | | | |