

December 2, 2015

Engineering for Change (E4C) is a recognized 501(c)-3 non-profit organization providing training opportunities for engineering students engaged in global development through Internships and Fellowships. Supported by a grant from the United Engineering Foundation (UEF), E4C's UEF Research Fellows will deepen their understanding of development engineering through research, analysis and engagement with the E4C community.

### **About the UEF Supported Research Fellowship**

E4C has received a grant to award up to ten (10) \$5,000 USD UEF Research Fellowships in 2016 for engineering students engaged in global development, in the US and abroad. E4C is recruiting Fellows aligned to E4C's target sectors (i.e. Energy, Health, Water, Agriculture, Housing, Transport and Information Systems) and geographic regions of focus. The Fellows will support content development via field research, data framework design and normalization for solutions presented on the E4C Solutions Library platform <http://solutions.engineeringforchange.org>. The Fellows will be selected based on their academic performance, professional and Engineering for Global Development (EGD) experience and references. The Fellows are a part of the E4C Solutions Library Program which supports the design and development of due diligence platforms and tools for designers, manufacturers and implementers of poverty-alleviating products and services enabled by E4C's community of subject matter experts. It is E4C's aim that the UEF Supported Research Fellowship will open opportunities and prepare future generations of EGD professionals committed to delivery of fit-for-service solutions for the underserved.

### **Principal focus areas:**

Reporting to E4C's Director of Programs, the UEF Research Fellows will work closely with the E4C team, members of the ASME Engineering for Global Development (EGD) team and expert affiliates to:

- Research and analyze specified poverty alleviating products via online investigation, literature review and interviews with product designers, manufacturers and/or implementers
- Develop the performance associated data framework and validate with E4C's subject matter experts
- Harvest and integrate field experience and user feedback of select solutions
- Inform the Solutions Library scaling strategy, including information architecture, product inclusion parameters, user experience and data administration
- Support efforts to strengthen the E4C coalition

Anticipated outcomes/deliverables include product reports, usage models, trend analysis, etc, to be determined together with the E4C Director of Programs.

### **Duration:**

- Summer term (beginning end of April/early May 2016)
- It is anticipated the Fellow will work about 75% on the direct product research, and will have remaining time to conduct independent research activities relating to either the Fellowship or the student's graduate research agenda.

**Candidate Profile:**

- Senior undergraduate, graduate and post-graduates in engineering with a focus and/or specialization in global development aligned to E4C's target sectors (i.e. Energy, Health, Water, Agriculture, Housing, Transport and Information Systems). Note: graduating students are eligible.
- Field experience with implementation of technology for development via academic programs, social entrepreneurship, significant EWB-USA project work, etc...
- Excellent project management skills, including the ability to work with minimal supervision, be resourceful, and meet deadlines,
- Proven ability to rapidly acquire knowledge, execute good judgment and capacity to communicate effectively.
- Demonstrated ability to work with diverse teams including engineers, development practitioners, entrepreneurs, academics, non-profits, for-profits and program implementers with efficiency and diplomacy.

**Application and Compensation Process:**

- Applicants must be recommended by a representative of the University in which they are currently enrolled (ex. Program Manager, Lab Head, PI)
- Applicants are required to submit an Application Package to [iana@engineeringforchange.org](mailto:iana@engineeringforchange.org) with the following:
  - o Letter of Interest (~1 page) indicating:
    - How the Fellowship aligns with personal goals and areas of study
    - Relevant experience in Engineering for Global Development
    - Demonstrated skills and accomplishments related to the position
  - o Resume
  - o Two (2) references submitted via <http://goo.gl/forms/DCwRa4o2I1>
- Fellows will receive a stipend of \$5,000 USD and be compensated for expenses associated with the research process.

**Timeline:**

- Applications will be accepted online Jan.15-Feb.12, 2016
- Notification of fellowship status will be made available to each applicant no later than Mar.31,2016
- Required in-person orientation Apr. 28-29, 2016 (tentative dates)
- Fellowship commences May 2, 2016 and runs for up to four (4) months.

**Location:**

- The Fellows may be based in their location of residence. Some travel to solution implementation sites and in-person meetings may be required and will be compensated.

**About Engineering for Change**

Engineering for Change (E4C) is built by a coalition of partners including the American Society of Mechanical Engineers (ASME), the Institute for Electrical and Electronics Engineers (IEEE) and Engineers Without Borders, USA (EWB-USA). E4C represents a dynamic and growing community of engineers, technologists, social scientists, NGOs and community advocates, whose mission is to improve the quality of life in communities around the world by facilitating the development of affordable, locally appropriate and sustainable solutions to the most pressing humanitarian challenges.