

January 11th, 2017

Engineering for Change (E4C) is a non-profit organization advancing Technology for Development (Tech4Dev) and a global community of more than 1 million individuals. E4C delivers original news, professional development and due diligence resources through programs and a digital platform (<https://www.engineeringforchange.org>) to enable knowledge exchange, prepare the workforce and raise the Tech4Dev innovation quotient. E4C provides 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 Research Fellows deepen their understanding of development engineering through research, analysis and engagement with the E4C community.

About the Research Fellowship

The E4C Solutions Library Program supports the design and development of due diligence platforms and tools for providers and seekers of essential technologies enabled by E4C's community of subject matter experts. The Program includes a Research Fellowship for engineering students engaged in global development, in the US and abroad. Fellows support content development for solutions presented in the E4C **Solutions Library platform** (<http://solutions.engineeringforchange.org>) – a living database of essential technologies - via field research, interviews, and data synthesis.

E4C has received a grant to award up to nine (9) \$5,000 USD Research Fellowships in 2017. E4C is recruiting Fellows aligned to E4C's target sectors (i.e. *Energy, Health, Water, Agriculture, Housing, Transport and ICT*) and geographic regions of focus. The Fellows will be selected based on their academic performance, professional and Engineering for Global Development (EGD) experience and references. It is E4C's aim that the Research Fellowship will open opportunities and prepare future generations of development engineering professionals committed to the delivery of essential technologies for the underserved.

Principal focus areas:

Reporting to E4C's Program Manager, the 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 essential technologies 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 expert advisors.
- 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, supply chain analysis, user feedback reports, etc...to be determined together with the E4C Program Manager.

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 ICT). 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 are required to submit an Application Package via this google form <https://goo.gl/forms/iNMcxX8gTThR16t32> with the following:
 - o General information about the applicant
 - 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
- The applicants should also submit two (2) *references* submitted via another google form that should be sent directly to their references: <https://goo.gl/forms/vpFTSnxHq7Nsj2YN2>. Applicants must be recommended by a representative of the University in which they are currently enrolled (ex. Program Manager, Lab Head, PI, etc.)
- Fellows will receive a stipend of \$5,000 USD and be compensated for expenses associated with the research process.

Duration:

- Summer term (beginning early May 2017 and ending early September 2017)
- 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.
- 15 – 20 hours per week is expected to be devoted to the fellowship.

Timeline:

- Applications will be accepted online **Jan.12th -Feb.17th, 2017**
- Notification of fellowship status will be made available to each applicant no later than Mar.31th,2017
- Required in-person orientation May 15th – May 19th, 2017 (tentative dates)
- Fellowship commences May 22th, 2017 and runs for up to Sept 15th, 2017.

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.

More 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.