

E4C FELLOWSHIP 2018 OVERVIEW (International)



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. Sponsored by mission aligned organizations, E4C's Research Fellows deepen their understanding of development engineering through research, analysis and engagement with the E4C community.



About the Research Fellowship

Fellows will support content development (product research, trend analysis, user experience reports, articles, etc.) presented in the E4C **Solutions Library platform** (<http://solutions.engineeringforchange.org>) – a living database of essential technologies - via desk research, field research, interviews, and data synthesis. The research will be done in one of 8 sectors covered by E4C (*Energy, Health, Water, Agriculture, Habitat, Sanitation, Transport and ICT*) giving the fellow a deeper perspective into the technology for development space (tech4dev) and engineering for global development.

More about the Fellowship

More About

The E4C Solutions Library Program supports the design and development of due diligence platforms and tools that support neutral information development about technologies targeted at underserved communities. The Program includes a Research Fellowship for engineering students engaged in global development, in the US and abroad.

E4C will award up to eight (8) Research Fellowships in 2018. E4C is recruiting Fellows aligned to E4C's target sectors (Energy, Health, Water, Agriculture, Habitat, Sanitation, 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, sector of specialization 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.

Duration:

- Summer term (beginning early May 2018 and ending mid-September 2018)
- 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 Dec 20th – March 4th, 2018
- Notification of fellowship status will be made available to each applicant no later than April 2nd, 2018
- Required in-person orientation May 11th – May 18th, 2018 (tentative dates)
- Fellowship commences May 14th, 2018 and runs for up to Sept 21st, 2018.

Timeline Diagram



Location:

- This fellowship is remote. The Fellows may be based in their location of residence with the only *requirement of having good Internet connectivity throughout the 4 months of the fellowship*. Some travel to solution implementation sites and in-person meetings may be required and will be compensated.

Compensation:

- Fellows will receive a stipend of \$2,000 USD in set of 3 payments per term. Payments are bound to performance and will be processed after completing defined goals/targets at the beginning of each term. Expenses associated with the research process will also be compensated.
- For International Fellows (outside the US & Canada) Internet connection support might be provided (Mobile data, Fixed Internet, etc.) based on need. E4C will cover up to \$160 - \$200 USD (depending on country rates) for the duration of the Fellowship. Receipts are required but overall conditions for this support will be defined during the selection process of the Fellowship.

Application process

What would you be doing?

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 & analyze** specified technologies via desk research, literature review and interviews with product designers, manufacturers and/or implementers.
- **Develop** performance parameters and validate with E4C's expert advisors.
- **Harvest and integrate** field experience and user feedback of select solutions through the creation of user experience reports.
- **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, user experience reports, trend analysis, supply chain analysis, etc...to be determined together with the E4C Program Manager.

Who is the perfect candidate?

- Senior undergraduate, graduate and post-graduates in engineering with a focus and/or specialization in global development aligned to one of E4C's target sectors (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 (Engineers without borders) project work, etc.
- Excellent project management skills, including the ability to work with minimal supervision, be resourceful, and meet deadlines.
- Proven ability to research and 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.

How to apply?

Applicants are required to submit an Application Package that includes the following:

- o Fill out this google form (<https://goo.gl/forms/7MSkBRICV5NqwtMh1>): this is the first step for your application and will include your general information as well as your sector of interest.
- o Send an email to mariela@engineeringforchange.org with the title "Fellowship Application – 2018". In the email include the following:
 1. Letter of Interest (2 page maximum) 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
 - What element of the Solutions Library is of greatest interest
 2. Resume
- The applicants should also submit two (2) *references* submitted via another google form (<https://goo.gl/forms/ly9KRkvRcz5F4r2A2>) that should be sent directly to their references. Applicants must be recommended by a representative of the University in which they are currently enrolled (ex. Program Manager, Lab Head, PI, etc.). *Please be sure to send this link to them and remind them to use the same name and last name as you submitted through your initial application in the first google form.*

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.