

HCD i-Lab

Human Centered Design
innovation Lab

Fellowship Application: Human-Centered Design Fellow (Engineering & Product Design Expert)

design for the other 90%. Apple, IDEO, IKEA, Nokia, Proctor & Gamble... The list goes on. Successful companies in developed economies use HCD as a core business practice. But today, design-thinking is used almost exclusively to create products and services for the richest 10% of the world.

What if we could apply HCD to problems that are of life-and-death importance? There is growing recognition of HCD in the developing world, which has launched some innovations such as solar lights, drinking water systems, and infant incubators. With the HCD i-Lab, we want to surge this revolution in design. We will bring the best HCD thinking to the developing world, to design for the world's other 90%.

about IDE. We aim to empower the poor by treating them as customers. We provide extremely affordable solutions to their most pressing needs. Whether it's a pump to better irrigate fields, or a market for affordable toilets... We improve income opportunities by developing markets and solutions.

We are an international non-government organization based in 13 countries. In Cambodia, we have reached 180,000 households with farming, business, water and sanitation solutions. We recently worked with IDEO to develop an HCD Toolkit for social enterprises. Our success using HCD to create an affordable latrine led to a feature in Fast Company, presentations to Harvard, UNICEF, and the United Nations.

why we need you. 80% of Cambodians live in rural areas, making less than \$1 a day. There is a need to increase their income earning potential through affordable innovations. But in Cambodia, innovation is stifled, and HCD is a virtually non-existent concept. Massive change is urgently needed.

**We are building the first HCD Innovation Lab in Cambodia.
And we need you to help us launch it.**

We are currently recruiting a multi-disciplinary team of top-calibre Design-Thinkers from around the globe. Our dream-team will include a Mechanical Engineer & Product Designer, a Human Factors expert, a Marketing & Business expert, among other top-tier staff. The team will be close-knit and talented – working on diverse and challenging projects that really matter, on behalf of IDE, IDE partners, and other clients.

are you the person we're looking for? You are passionate about designing extremely low-cost innovations for the rural poor. You're an experienced design thinker with a track-record of bringing innovations to market. You have deep experience in connecting with the needs of end-users, and in turning insights into innovative solutions. You thrive in a collaborative, multi-disciplinary environment where ideas build on one another. And you have the utmost respect for other design disciplines. You have worked in an international or cross-cultural setting, so you appreciate the benefits and the challenges involved. You like getting your hands dirty with field research, user research, and prototyping. You like to build prototypes to think. You're resourceful and creative – you could find your way through bustling markets in Cambodia to creatively source what you need. You're skilled at managing multiple deadlines, as

you love being engaged in a diversity of projects at once. You're a leader – you enjoy mentoring, leading teams, and managing client discussions.

You are a mechanical engineer (bachelors or masters, *or* equivalent experience), with 2-4 years experience in an HCD context, including 2+ years of product development. Your approach is creative. You've designed individual parts as well as entire systems. You're an expert prototyper, and you're used to working nimbly as road-blocks arise. You have basic metal working, wood working, and hand skills for prototyping ideas. You're skilled at evaluating design concepts with hand-built form and functional models. You understand a wide range of production methods and manufacturing processes – from sheet metal to injection moulding to compression moulding and beyond. You're keen to work with local manufacturers to brilliantly execute innovations. You ideally have some experience engineering or manufacturing in the developing world.

you will be the lead mechanical engineer on our multi-disciplinary team, based in Phnom Penh for a 1-year Fellowship. This is an opportunity to work on real-world problems alongside a close-knit, diverse, and top-calibre team. You'll wear many hats, including that of a coach, to grow HCD in Cambodia. You will have a rich experience that will touch the lives of those who most need life-changing opportunities. And at the end of the year, if we see a mutual fit, you'll be offered an opportunity to stay on as full-time Leader at the i-Lab.

what we'll pay for. Our intention is to ensure a standard of living that matches other young professional expatriates in Phnom Penh. You may not save (a lot of) money, but you likely won't need to spend your hard earned savings or go into debt. The fellowship covers:

- Return airfare from your home country
- Housing allowance in individual accommodation suitable for expatriate professionals
- Health insurance
- Visa allowance
- Adequately comfortable living stipend suitable for professional expatriates

in summary:

- Mechanical Engineering Degree (Bachelors or Masters), or equivalent experience
- 2 - 4 years Mechanical Engineering experience in HCD context, including 2+ years product development
- Metal working, wood working and hand skills to prototype, including hand-built form/functional models
- Experience with wide range of manufacturing processes
- CAD and Solidworks
- Creative problem-solver
- Collaborative and thrives in a inter-disciplinary team
- Cross-cultural or international experience
- Project Management skills
- Communication skills
- Leadership and mentorship skills
- Ideally engineering/manufacturing experience in developing world

when can you start? We're ramping up quickly, so the sooner the better. Applications will be accepted until **December 3** or until we find a stellar candidate, which may be before then. So apply soon.

Please send your CV, Cover Letter, and Portfolio in PDF format to mtakeuchi@ide-cambodia.org. Remember that we want to see examples of your best work. So use your portfolio to tell us your story, and why you outshine other candidates in terms of the specific skills and experience we've outlined in this description.

