## **Final - OSE Apprenticeship**

Do you want to do transformative work for a living - working directly on pressing world issues? Do you want to create the next economy - based on open collaboration - which leaves nobody behind? We have created a program that enables you to do exactly this.

We are pleased to announce our first ever 6 month Apprenticeship - the OSE Apprenticeship - starting July 1, 2021. You will study with me directly - and you will master a number of collaborative design and build skills - and get a chance to collaborate with Open Source Ecology full time when you finish the program.

Over the last decade, we designed and built dozens of open source industrial machines and published the plans on the internet for free. We taught hundreds of student collaborators to build themselves - and we also innovated on distributed enterprise models. We published several product releases, such as the Compressed Earth Block press, 3D Printer, and most recently, the Seed Eco-Home. Our apprenticeship allows you to dive right in, learn all that we have learned - and move this work forward.

The 6 month program builds around the Seed Eco-Home as a revenue stream. We've learned how to build effectively with swarm builds - which allow us to build a house with 24 people - in a single week.

Our goal is to train entrepreneurial partners to collaborate with OSE. First, we want to solve housing. How? With an affordable, ecological, incremental, digital Housing 2.0, low-cost house that can be built either DIY or by professionals - in the most efficient, ecological, highest quality, and cost-effective way possible. With open source. The current cost is \$50k in materials for a 1000 sf home. We're starting with light frame construction this year, and moving to Compressed Earth Block in 2022. The Seed Eco-Home includes developing supporting machines, such as our tractor and brick press, and larger 3D printers for construction materials printed from waste plastic, and an industrial-grade sawmill - all open source. The work also includes innovating on social enterprise models, and organizing large scale collaborative development events.

In the 6 months, you will gain mastery in basics of open source, collaborative design and build and have a chance to learn management and enterprise skills. We are building upon our modular, construction set approach - with open source part libraries and design guides. You see, prototyping should not take months or years: it takes only as much time as determined by the prior art available. That is the beauty of open source: not reinventing the wheel, as the information is open. So we can start - exactly at the frontier of human knowledge. Unfortunately this is rare in today's world of proprietary design - but our goal is to change this - with you taking an active role in this. As such, we work on economically significant products - houses, tractors, 3D printers, production machines. In order to engage in this fully - You will need to learn a basic skill in CAD design, Wikis, crowd editable docs, rapid prototyping with 3D printing and CNC torch table, calculations, microcontrollers, and basic skills of collaborative literacy that allow you to find and organize all work on our wiki - in a matter of seconds - while involving global teams in a large-scale collaborative process - AND using entirely open source and accessible toolchains - so anyone can participate.

The biggest learning is a mindshift - to a completely collaborative approach. Open collaborative - means open source licenses for products, working openly by logging work, using wikis and cloud-editable docs, involving outside audiences throughout, using crowdfunding, and organizing reward-based incentive challenges and hackathons. It takes specific skills - and moreso - a different mindset - to actually do this right - in a way that allows for open source economics to emerge - producing revenue models that are not based on artificial scarcity and exclusion. That is the yet-undelivered promise of open hardware. It takes a psychological shift - to recognize that we are not alone - that we are all in this world together. Our mission is collaborative design for a transparent and inclusive economy of abundance.

In our program, the day to day is Design Training- where you learn about all types of functional building blocks - like legos - that constitute all known technology. Then we follow with a couple of hours practice in creating new designs in CAD based on part libraries and the design training. And then we have - 4 hours of builds each day - whether house modules, machines, or others. On Friday - we work on site infrastructure and upgrades - such as a new solar-powered workshop, building more classrooms, aquaponic greenhouse, more microhouses, biodigester for onsite wastewater recycling, access roads - building tools and more machines - doing tree plantings - all using our open source equipment that we will either build or have built already. Effectively, you are learning how to build a global village.

Saturdays are Global Collaboration Days - dedicated to video production, documentation, creating rapid-learning materials, developing collaborative protocols, designing incentive challenges, organizing hackathons, and other tasks - all combining to involve the whole world in this world-changing work. The key to involving others is understanding work breakdown structures - across multiple disciplines - so we can divide complicated tasks into bitesize chunks - using the principle of modular breakdown. The internet makes this doable.

In the evenings, we do an enterprise development seminar at least twice a week - where we collaborate on open source business development - including marketing, and philosophy - using socratic dialogue - and following the paradigm of distributive enterprise. Meaning - we develop enterprise models - and publish them on the internet for free - for anyone to to get involved. We will create things like marketing copy, product websites, brochures, economic analyses, enterprise organizational structures, recruiting strategies, and other assets that help us and the world get set in production. But before that - we always ask the why - why we are doing it - does

it really help - does it have purpose - does it give life. The larger idea here is that - economics, which by the way originally means House Keeping - or making a living - should only be a small part of one's activity- and the majority should focus on our true passions and interests, towards cultural and scientific progress - and the things that make us human. Yet we live in a world quite the opposite - where very few get to follow their dreams and become immortal - and that is a fundamental bug in our operating system - that needs fixing. So we think and act on making life and enterprise easier so we can thrive with amazing modern technology - and pursue our true pursuits - of self-determination.

In the apprenticeship - There is also a bonus. Because the Summer of Extreme Design-Build - or Summer X - is happening September 1 - the OSE Apprentices also get to participate - in parts related to the Seed Eco-Home. See the Summer X program announcement.

We will be learning guite a bit in a rather short time. How? The secret sauce - naturally - is open source - working openly - spending zero time on competitive waste - teaching and learning from each other - all of us - with a process based on collaborative, modular, open source design, part libraries as building blocks, global feedback, and swarm builds - all together - unbridled collaboration. One of our breakthroughs has been - reducing prototyping cycles from months to days - using modular building blocks like legos. We're learning constantly how to work more effectively with remote collaborators, working with the crowd. We don't have to do it alone - and while we are at it - we end up faster-better-stronger - where the rate of progress - depends simply upon available prior art. This a concept whose potential- I believe - very few people truly understand. We are more ambitious and optimistic about this potential than ever. It is obvious to us - that open hardware will simply gobble up in terms of impact - that which has already happened with open source software. Our goal for OSE, is the open source economy created by 2035 - reaching what we call the collaborative singularity - the point in human history - where we actually learn to cooperate. This to us, is an inevitable part of human evolution. Otherwise, we just destroy ourselves. This is what society needs to learn - in order to survive - I don't think it's optional.

The 6 month apprenticeship may not be easy for some - as it requires the psychological growth to embody the full value of open - ceasing to work solo - and to participate in - the collaborative creation of genius. Edison said that "Genius is one percent inspiration and 99 percent perspiration," and that's how it works at OSE - it's hard work. Except - if you learn to leverage the crowds - and they contribute openly - then we have the potential of genius squared. And we have fun at it. But it will be 99% perspiration - up to the point that we up our skill set - until we know - how to work openly with others. Then we can do anything. The concepts and ideas are easy! It's easy to talk about collaboration - everyone says they do it - but in reality? Not common - I look forward to the day that patents become obsolete. We're not there yet. Sharing openly - can be quite threatening - imagine a company like Intel opening up its chips? Not happening - yet. The possibility remains to create collaborative wonders - and certainly raise humanity - to a new plane.

For the apprenticeship - we are looking for super-cooperators - interested in a diverse, generalist skillset. We all teach each other - and I look forward to learning a lot from you. We pull together - developing the next economy - and co-creating because we have great proofs of concept - and now it will be the 99% perspiration. We have a long way to go - that's why we want to coordinate and pull together. But think about it - development has to be documented only once - if we're not reinventing the wheel. So the critical mindshift is understanding and practicing this simple point. If you think that you can do better on your own, and not push new developments back into the commons - then our culture may not be a fit. We are looking for people who want to change the world - by learning the obvious - though hard in practice - skills to do so. The program is designed to train autonomous entrepreneurs to collaborate on pressing world issues - not what simply pays. Nobody will fund the revolution - that's against the rules of the current system - so we bootstrap our way.

Out of the program, you'll learn to build the full Seed Eco home. You will have a chance to focus on building machines - or the management and executive tracks. Our goal is to create possibilities - and to provide opportunities for anyone interested - at the level they choose. The baseline is a design-builder coming out of the 6 month immersion - a person who builds - but understands the design sufficiently to start making meaningful improvements. With the hundreds of hours of CAD practice throughout the program, we expect graduates to be fully capable of making design changes and producing build documents such as instructionals or house details for building officials. Our advancement opportunity starts with design-build, moves to managing crews - and moves to the executive level - or organizing build and crowd development events. And the last rung is open source movement entrepreneurship - more for the multi-year medium term - people who start other allied enterprises based on OSE methods. The concept is starting OSE-inspired campuses worldwide - serving as world heritage sites - of cultural and economic transformation. A movement entrepreneur is someone who believes that the world does indeed need changing - and has the courage to collaborate openly and and engage fully to change it. By changing the rules of the game. I wish I learned that in college.

There's a twist here - OSE's goal is to train entrepreneurs - not to create employees. Those are 2 different breeds. The goal is that the people we train work \_with\_ OSE as a coordinated global movement - not work \_for\_ OSE. We are interested in starting OSE campuses worldwide - highly coordinated \_and\_ autonomous - partnering with OSE International on a much larger goal than any branch can do alone. Perhaps a good way to describe this is an open source franchise - with the twist from a regular franchise - that all our knowhow is open, collaboratively developed.

Anyone can download all our information for free - but we provide immersion training to those who want to learn significantly faster than they would on their own.

So there it is. here is an opportunity for you to transform your index of possibilities, pursue full meaning in life, grow your skill set in more ways than you probably imagined - meet amazing people from all over the world - and change the world while leaving nobody behind. And having fun while at it - by team collaboration. There was a dream that was open source hardware. It shall be realized.

Join us. We are accepting up to 24 Apprentices for the first cohort, starting July 1, but accepting new entrants on a rolling basis. We have a generous scholarship program up to full tuition - so if you are really in need - it's affordable for you to join us. Our training is inter-class, multicultural, global audience, and relevant to the third and fourth worlds. We encourage young women and men of any age to apply. Special invitation goes to women - like my partner Catarina who descended from Brooklyn to the middle of nowhere, Missouri - and now can design and build like a pro. To apply, send us a video of interest as the first step - telling us 3 things - who you are - why you are interested in the 6 month program - and how this contributes to your life's goals. We will respond in 24 hours, and continue with an interview. See you July 1 at the gates of Factor e Farm. Thanks for listening, and please pass this on to your friends.

## Take 1 - OSE Apprenticeship

Would you like to do transformative work for a living? We are pleased to announce our first ever 6 month Apprenticeship - an immersion learning opportunity that allows successful graduates to work with Open Source Ecology full time.

Over the last decade, we designed and built dozens of open source industrial machines - and published the plans on the internet for free. We taught hundreds of student collaborators to build themselves -- and we also innovated on distributed enterprise models. We published several product releases, such as the Compressed Earth Block press, 3D Printer, and most recently, the Seed Eco-Home. Now we invite you to create the future with us - in a one of a kind opportunity that will change your life and shift your index of possibilities.

The 6 month program focuses on the Seed Eco-Home as a revenue stream. We've developed breakthrough swarm build techniques - which allow us to build a house with 24 people - in a single week - using our collaborative build methods. We will teach you exactly how to do this, or if you are more ambitious - how to actually run and organize such swarm builds.

Our goal is to hire all of our successful candidates coming out of our 6 month program - though you can also do it on your own if you like. Our motivation is to collaborate on open product development - so that we can bring the most affordable, ecological housing to the world - to solve for affordable housing. This included developing supporting machines, such as our tractor and brick press, and more recently larger 3D printers, and a production-grade sawmill

. We don't know why you would, if we're offering advancement possibilities. The baseline is a design-builder - a person who builds - but understands the design sufficiently to start making meaningful changes in it. Our growth track starts with build, moves to design, moves to managing

crews - moves to executive level of organizing crews - and the last rung is open source movement entrepreneurship - people who start other allied enterprises for solving pressing world issues.

The 6 month program is a start - up to the build and management levels. This is a way for you to engage full time in OSE research and development - as the Seed Eco-Home funds continuing progress. The intent is continuing collaborative development. It's much more than just building - but that physical experience is a prerequisite for designing, managing, and executing on a higher level in our program of advancement.

The 6 month program you on a day-to-day of global, collaborative design, theory, practice, and builds. M-F we have a curriculum of 1 hour design learning, 2 hours of design practice using open source computer aided collaborative design and publishing, and 5 hours of collaborative builds. We all pull together in open enterprise development, On Saturdays, we do publishing, video production and incentive challenge organizing - as we learn to involve the whole wide world as the core of our of a global, collaborative effort using online collaborative platforms such as HeroX, an offshoot of the X Prize. We focus on a modular design, pattern language libraries - as we learn to stand on the shoulders of giants.

The first 2 months are construction machine design, build, and use in infrastructure building. We will build the CEB press and tractor - and together with a sawmill - we will make CEBs and lumber - and build with them. This is all in the mindset of replicable enterprise development - of machines, construction materials, and state of art eco-housing. We'll be building another large, off-grid workshop with off grid solar panels, along with additional infrastructure as we grow our campus for a stable population of 24 people year-round. If you participate, you will literally learn what it takes to build a village.

Now comes the fun part - you will get to participate in the construction, enterprise, and other parts of the Summer of Extreme Design and Build program - the program directly related to building housing. Your priority is to learn how to deliver housing - including the associated machines that provide unbridled economic power and thus fuel open enterprise. The idea is - you effectively get to effectively set your own pay - based on the skill set you gain. We start at \$25 - \$65 dollars per hour - depending on the builder, designer, management, or enterprise track skills earned. There is no free lunch here - as each pay level comes with its own responsibility. It is up to you how much responsibility you are able to learn, and take on. Everyone in the program can learn at their pace - while developing collaborative, open source assets - that the entire world can benefit from.

Our intended audience is people who want to work with OSE - understanding that collaborative development - means better, faster, stronger products - to reduce the barriers to thriving. Under the assumption that we're all in this together, and nobody should be left behind. We have a generous scholarship program with up to full tuition - so if you are really in need - it's affordable for you to join us. We want this to be an opportunity relevant not just for the elites, but 3rd and 4th world included, cross-class and highly multicultural.

After the program's 6 moths - you have the opportunity to work with us full time, and on site. In this scenario, we are working 50% of the time delivering Seed Eco-Homes to customers, and the rest of the time, is constant learning and improvement. This is for people interested in lifelong learning - we are not looking for people who think that they know everything already. In fact, we're looking for people who know that they know nothing - like me - so we spend the rest of our lives learning. We want supercooperators - or people to whom I don't have to explain how patents suppress innovation.

The math is simple. The seed Eco-Home costs \$50k in materials, and we charge \$50k for a turnkey build. That comes out to \$50/hr for a team of 24 finishing a house - in one week. This means we can pay - \$25-65/hr to anyone involved. According to the role that they take.

This year we're starting Seed Eco-Homes with light frame construction, and next year, we are moving to CEBs - that is - Compressed Earth Block - so we can build industrial and eco housing from the dirt the soils beneath our feet.

We welcome young women - and men - of any age to apply. Young women and ladies - this is for you too - just like my partner catarina - who descended from Brooklyn to the middle of nowhere, Missouri- and now can build anything. She is designing new house models, and making Seed Eco-Home 1 look out of this world great.

So if you want to build yourself, build your world, then join us. This won't be easy - as collaborative genius is 1% inspiration - and 99% perspiration - as Edison once said. The more we fail, the more we succeed. This is a psychological quest - of cultivating a growth mindset - so that the necessary learning can take place. If you are ready for a deep dive, and have a commitment to change the world - this can be your playground. Join us - in only 2 months - starting July

If you thrive on solving pressing world issues, this is for you. So join us.

## Summer X

Did you ever want to design and build something, but did not know where to start? Have you ever wanted to develop something that could change the world - but you didn't even think it was possible?

We have created a program that will transform what you think is possible - and give you the hands on-skills to build it. And you will probably gain more practical build experience in our 3 month program that most people get in a lifetime. Welcome to the world of collaborative design.

Over the last decade, we designed and built dozens of open source industrial machines and systems - and published the plans on the internet for free. We taught hundreds of student collaborators to build themselves -- and we also innovated on distributed enterprise models. We published several product releases, such as the Compressed Earth Block press, 3D Printer, and

most recently, the Seed Eco-Home. It's an exciting time, as we just may be getting close to viral replication.

In our program - you will have to the opportunity to learn and build upon all of our experience to you - in a 3 month crash course - of design and outrageous builds. We start with the Seed Eco-Home. The Seed Eco-Home is an expandable, 1000 sf home that you and a friend can build- in 1 week - at the lowest possible cost. We will walk you through every step, using our rapid, modular build methods. We will build the next iteration of our aquaponic greenhouse - and then 3D printers, some huge ones - and tractors, other CNC machines, a compressed earth block press, sawmill, and more. We will do a 1 day build of a 3D printer - which you can take home with you. We will teach you how to design just about anything in FreeCAD. Most importantly - we teach you how to collaborate and innovate as a large team - coordinating with both local and global efforts.

Wait a minute, how is all this and more - possible in such a short time? Our secret is Modular, open source design, and collaborative, rapid, swarm builds. First, Modularity allows us to break up large problems- into small, bitesize chunks. Second - the modules we design are interchangeable and multipurpose - like Legos. Frames, power units, rotors, motors, Universal Axes, Universal Controllers and electronics, hydraulics, wall modules, and plant towers. These can be used, reused - and modified or scaled in multiple ways. Third, we use a construction set approach: Why design one thing at a time - if we could design a 100 - by designing transparent, easy-to-build, reusable modules - that can make hundreds of different things? **Effectively** - module-based design with team swarming allows us to compress design and build times from months to days - and we'll teach you exactly how to apply this powerful method.

Our central theme is collaborative creation of genius. Edison said, "If we all did the things we are really capable of doing, we would literally astound ourselves." We think that many people can amaze themselves like this - by developing a collaborative mindset of rapid learning. The key is - a personal breakthrough - on the true meaning and value of collaboration that's open. In today's world, - there is plenty of half-sharing, keeping the best parts secret - like patents, proprietary info - the core of how business works. Think about it - even in school - did you consider that you just get the second best - because the best is trade secret? Why not, instead - create a society - that helps everyone stand on the shoulders of giants? It takes a mind shift - to do this. It starts in believing in We - not Me - because we're all in it together. Second, it requires the commitment to stop reinventing the wheel - instead - to open source it. That means using tools and skills of open collaboration - to make open products. To solve pressing world issues faster than they are created. To learn rapidly, because the best information is open. That - this is the promise of the digital age of information sharing.

Thus - we are really teaching a new culture. We ask - how to create - mass collaborative genius - across the whole world? We practice this - in small steps - in our program. The day to day in the program involves class time, design collaboration time, and most of the time - the builds. We focus on global, collaborative work - not solo projects. We welcome young women and men - of any age - to apply. No prior experience is necessary.

So if you want to learn powerful collaborative design and build skills - then join us. You will have fun - you will build relationships and friendships - and you will be amazed by what you can accomplish. We also have an enterprise track on the Seed Eco-Home, so you have an opportunity to do open source work - for a living. We invite you to Build yourself, help others with your skills, and change the world. Please pass this on to your friends. Space is limited, so sign up soon.

the same time -creating aunique opportunity - for all three locations to benefit from each other. You will collaborate via the internet - with 100% open source toolchains - allowing you to build viable products collectively - ina fraction of the time -it would take to do on your own - with YouTube videos as your only support.

It's like a crash course for open hardware. You WILL learn, you WILL build relationships and friendships, you WILL have fun, and you WILL be blown away by what you're capable of in only 9 days! We welcome young women and men - of any age - to dive right in - to push the limits of rapid learning - to explore the limits of what we all can do together- with open hardware technology - through open collaboration. So join us for a fun experience that will shake your world, expand your mind, and reframe your definition of what's possible. Enrollment is limited so please register now.