

Catarina - We are pleased to announce the Open Source Microfactory STEAM Camp, a one of a kind immersion course in the design and build of technology that matters.

William - Did you ever want to design or build something - but you did not know where to start - or you did not even think it was possible because of the tools and skills involved?

Marcin - So we created a unique 9 day program to fill this exact need. Now, you can learn to weld, build 3D printers, create 3D CAD designs - and using our part libraries - design all types of CNC machines. Not only that - but you will learn to do this using a 100% open source toolchain - so you can build just about anything - easily and inexpensively.

William - We want to create a transparent and inclusive economy of abundance. We believe that it's up to all of us - to build a world that we all want to live in. And in our workshop - you will get some practical skills to do just that.

Marcin - You'll get a crash course on mechanical and CNC design. We want you to take the skills that you learn and apply them to your own community - such as starting a business, teaching others, and making an impact.

William Each day has design training - and workshop time to practice what you learned. We have 18 classes total, where we teach you the basic vocabulary of design - where you will learn how to use our part libraries to build almost any machine. We also have, literally - tons of tools and materials to work with.

Marcin - You will get experience with the Universal Axis - which is literally a+ robotics construction set - which allows you to build CNC machines of any size and shape - just like you were building with Legos.

William - We will show you how advanced technology - can be achieved by common people - through open source design, and a construction set approach.

Catarina - We welcome young women and men - of any age - to participate, to push the limits of what we all can do with open hardware technology. So join us, for an experience that can change your world.

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Marcin - So we created a unique 9 day program to fill this exact need. Now, you can learn to weld, build 3D printers, create 3D CAD designs - so you can design and build your own microfactory. Not only that - but you will learn to do this using a 100% open source toolchain - so you can build just about anything - easily and inexpensively.

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No, really - **you** CAN do this!

In 2011, Marcin rocked the TED world with his inspiring talk on Open Source Ecology; problem is, folks, in a world clinging onto old habits y'all gotta git off the couch and git moving.

We show that every complicated machine is a bunch of simple components put together. We show that every complex CAD design arises from adding and subtracting simple shapes.

STEM Camp Script General

1. Carry on message that You Can Do It
2. Audience - makers in waiting - people who are not makers. Like me first conceptualizing that - "Hey a person can be building this, and that could be me - and that's the only way it can change because the system is entrenched in its ways
3. Be specific
4. Higher Level Messaging -

5. The habit we aim to change is turning people into producers
6. Define what is missing.
7. Exude possibility
8. Mention cordless drill as a case in point.
9. Make first paragraph recyclable - timeless content

Outline

1. Capture attention of audience: makers, teachers
2. What we have - UVP
3. State current state
4. Speak specifically to our solutions

5. The world as it is now

The world's citizens tend to participate passively in local and global affairs. They feel that their contributions do not matter and that other people will take care of managing the direction in which our emerging global society is heading.

6. The world as we would like it to be

The world's citizens take an active role in local and global affairs. They feel that they belong, have an important role to play and find other like-minded collaborators with whom to strive for the betterment of society.

The Script - 3 minutes + who speaks when.

Part 1 - Intro and Problem Statement

1. **Marcin** - Did you ever want to design and build something but didn't know where to start? Or it didn't even occur to you that that is even possible? Are you are a teacher who wants to teach your students skills that matter, lessons that transform lives, things that move beyond the pencil and paper?
2. **William** - You are not alone, millions of people yearn for such a purposeful and rewarding education and career.
 - a. Y'see, Marcin, I'm a teacher - and I see a big shift in students from kindergarden to grade 12. By the time they make it into my grade 12 classroom, the creativity is all but gone. This is not the intention of the teachers but the side effect of a system based on the wrong assumptions about human nature.
 - b. We are developing immersive, hands-on programs that will rekindle the flame of childlike curiosity and significant capability in youth and adults.
3. **Marcin** - How do we do this? What you learn connects you to a growing network of collaborators around the world committed to the same vision.

Part 2 - Solution - What we Teach and How it's Different

4. **William** - We offer a one-of-a-kind STEM Camp where we together learn how to develop a new approach to education that leads to capability, insight, motivation and meaning -

where the participants develop their own enterprises and graduate with valuable skills which are then shared with a growing global community.

5. So, William, how do we do this? We show that every machine is a bunch of simple components put together. We are offering 18 design sessions.
6. **Marcin** We are talking about lightweight printers - and heavy duty machines for making engines - a new technological basis for society - not linked to endless growth but tied to the vast potential of the masses of humanity to powerfully support each other. Machines and technologies produced by and for a caring community of entrepreneurs and makers who know that in a world of abundance everyone can live meaningfully and prosperously if given the right conditions and support..
7. **Our difference according to William** - We are building an ecosystem, a construction set for building to your world. Further, we are actively working on helping you start your own business to benefit your community. We are actively shaping the culture of our next civilization - the unified global civilization.
8. A civilization in a box that can be replicated inexpensively anywhere in the world.
9. **Marcin** - The Desktop Microfactory - 3D Printer, filament extruder, precious plastic shredder and 3D scanner - an entire small scale manufacturing
10. **Marcin** - You will learn about Machine Design. What? That's complicated. Not really. A tractor is a box with wheels...design - You see - all machines are just frames, power units, controllers, shaft, and couplers, and some other parts. We are offering 18 design sessions - 2 hours each day - on the basics of multipurpose, mechanical and electronic design. Class + workshop time right after class -
11. **William** - Universal Axis - a robotics platform for building any CNC machine. We will build several.

Part 3 - Big Deal - Collaborative Design

12. **William** - OSE has definitively shown the validity of its methods with the successful creation and sale of several open source machines. This next stage is a project for a 100,000 people. We have proven that a bunch of citizens can build a tractor or 3D printer - but this is about people stepping up to the plate and creating new businesses based on the OSE Microfactory - In our STEAM Camp, we will provide the tools to do just the same.
13. **Mutton** - We are aiming at facilitating creation of right livelihood, and enterprise.
14. **Willyumyum** - And the associated change in human behaviors. The desktop microfactory is coming to a desktop near you - but only if you seize the opportunity to be an entrepreneur and make it happen.
15. **Marcin** - We are trying to change the world with a first tangible example of open source hardware - making a real economic impact - the open source DIY cordless drill. We will apply our skills to building a cordless drill. And we plan on deploying a 1/4M prize for the world's first, open source, 3d printed, professional grade, cordless drill - 100% open source design - and manufacturing. But this is only the beginning.
16. **Catarina** - Revolution doesn't happen when society adopts new technology. It happens when society adopts new behaviors - we are supporting that revolution with the OSE

Microfactory STEAM Camp, **Catarina** - and that both guys and gals can do it. (picture of girls at the library)

Conclusion

17. **Marcin** - Society doesn't change through politics. It changes through grassroots global collaboration, tied to a vision of an abundant society. We just teach some productive skills as catalysts for this change.
18. **William** - We aim to populate the planet with small interdependent open micro-businesses run by inspired, informed and capable entrepreneurs - a new paradigm that means economic prosperity will be more evenly distributed, local economies will thrive and far more individuals will participate in the building of civilization...let us all strive to become thousandaires instead of millionaires or billionaires - that is - let us organize our communities and work such that a natural equilibrium is reached - so that we do not pursue unfettered growth but rather seek to live lightly, interconnectedly and wisely on a healthy finite planet.
19. **Marcin** - Well, folks, it's about time we learned to transcend artificial scarcity - transforming our culture to a globally connected collective of collaborative problem solvers. The DIY maker culture is here and it stands to transform our world - but only if YOU (yes that means **YOU**) get up and participate in this vast historical process. Let's get started!

- 20.
21. **Fix This Part Marcin** - A tractor is a box with wheels - and a complex cnc machine is a set of universal axes that moves around a tool head in a
22. (Uncle Sam Wants YOU to Rekindle the DIY Maker Culture in America (and the rest of the world too!!))
23. ~~We - Why yes, Marcin, I can think of hundreds of people of the top of my mind who fit that description - full of pent up creative energies but without the courage or habit of expressing them in a society obsessed with "experts" - Society claims to embrace creativity but in reality it effectively undermines it in educational processes that can be traced throughout childhood and adolescence. Our collective attitude that experts know best prevent students from learning of their own talents and capacities as only the very best are afforded encouragement and a chance to perform. The result is that numerous adults do not fully mature and carry around a profound sense of guilt and underachievement. The "I am not good enough to do that" culture exerts untold harm on our collective well being and keeps the majority of humanity's latent talents hidden. We seek to help our collaborators find these gems and share them in a world desperately in need of new purpose, motivation and direction.~~
24. Well I've met many people that....Yet everyone has latent talents that they can express.

25. Are you a teacher yearning to create meaningful education - where your students not only learn but transform your community as they go?

Audience

1. Did you ever want to design something but didn't know where to start?
2. Are you a teacher yearning to create meaningful education - where your students not only learn but transform your community as they go? Where students learn meaningful practical skills along with the theory? Where action speaks louder than words?
3. As a teacher - do you want your students to be the entrepreneurs building your community?

Unique Value Proposition -

1. Practical machines - productive machines of civilization
2. Machines as a catalyst for human transformation.
3. Collaborative Literacy - but it's hard to explain. Try to explain how we are different from FIRST - we are transforming, not tweaking.
4. This is the most unique STEAM experience that you wP
5. Part of a continuing effort - building upon past projects

Content?

Where is this? Local and Global

Are you a teacher who wants to

I believe we have a S

Have you ever through that something is not quite right, something is missing from our world? Know that you are not alone! Millions of people are dissatisfied with civilization as it stands. After all, what is the purpose? We go to school, get a job, get money, spend it, retire....all for what?

Enter the OSE Microfactory STEAM Camp!

We offer STEAM education with a vision and purpose! We are actively building the next iteration of civilization - unified, educated, capable, caring and inspired!

Our educational experience is immersive, hands-on, interdisciplinary, connected to a global community and aimed at transforming global society - all for the one time low cost of US\$895! Where else can you have your cake and eat it too? Not only do we offer a rich and engaging curriculum - it is tied to a greater vision - a motivation - a purpose.

Get ready to rock your world and set it aright! Join the ultimate STEAM project and save the world while you are at it!

No experience? No problem - our educational programs are designed to rapidly onboard new participants through careful creation of a supportive and interactive learning environment - we have as many students as we have teachers - everyone learns and teaches along the way!

Not convinced yet? Just turn on the news!! Would you like to be part of the problem or part of the solution?

How do we do this?

We are on the pathway to generating integrated humans - humans with a purpose - humans who benefit from a coherence between learning and action between individual and community between local and global contexts - a new human race! Globally connected local communities of protagonists ushering in humanity's next age.

Our educational approach has three elements:

Coherence

Empowerment

Community Connection

Together, these provide a powerful motivation and purpose, inspiring participants to develop their unique talents and skills towards the betterment of the world.

When the lessons are done, the learning is just beginning - we foster intellectual independence and interdependence by challenging collaborators to apply what they have learned in their own local context, starting related educational activities and even businesses and organizations using the content of our ever evolving "**Civilization Starter**"™ curriculum.

Time is ticking! Civilization cannot wait. We need a new one and we need it now! Jump on this train before it leaves the station!

Where does this all take place? Here, there and everywhere! Visit Factor e Farm - our educational facility for integrated humans.

We aim to develop the powers of the human mind, advance the boundaries of pure science and enable participants to discover their true selves all in the rugged natural beauty of rural Missouri

- Yoga, meditation and the powers of the human mind
- Collaborative Literacy
- Community Service
- Technology

The Desktop Microfactory - a low hanging fruit on the tree of civilization regeneration.

\int humans



Christina working on the OSE (Lyman) Filament Extruder