

Sketching in Hardware 2011
Happy Birthday
kippkitts





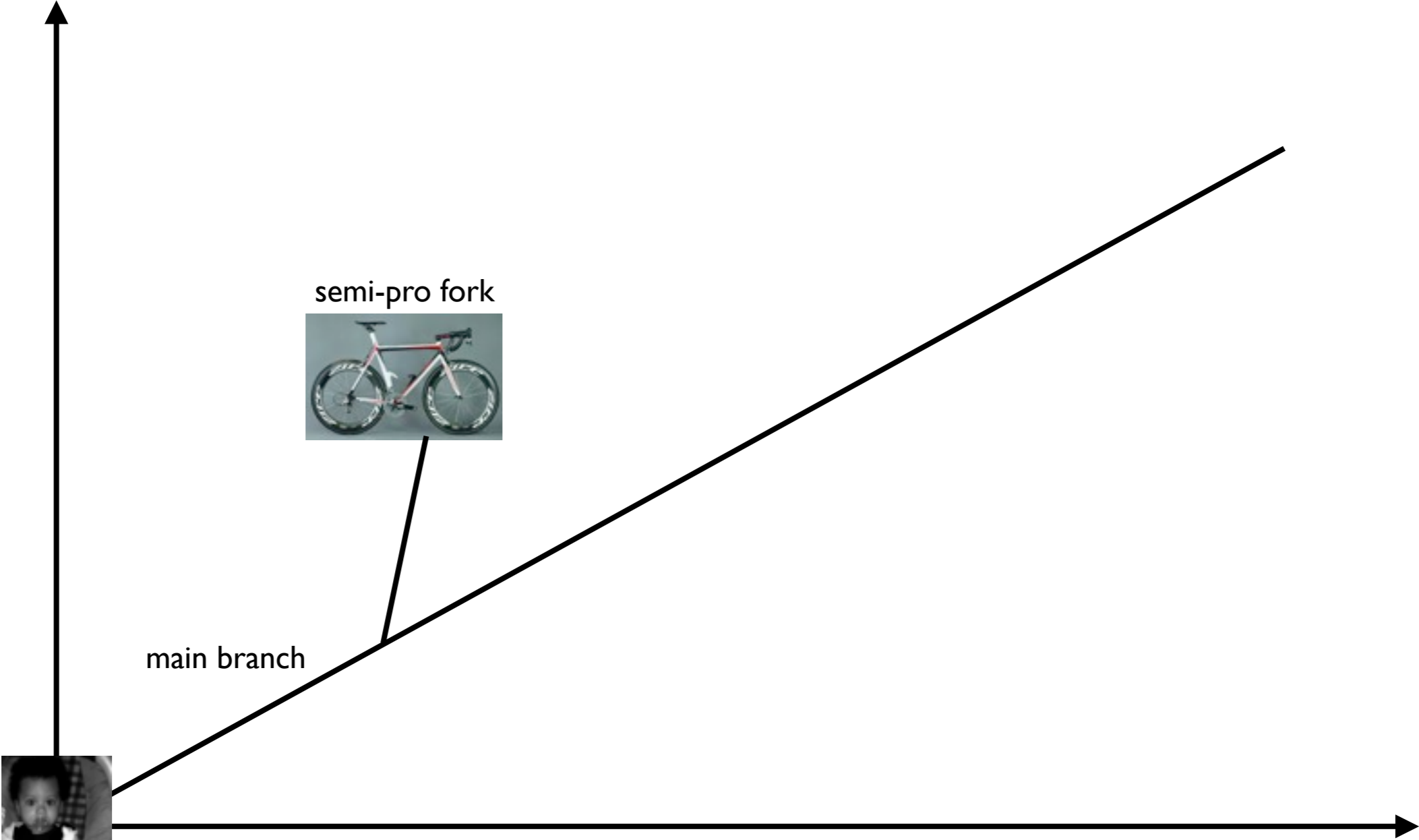
kippkitts_{LLC}

New Jersey





Awesomeness

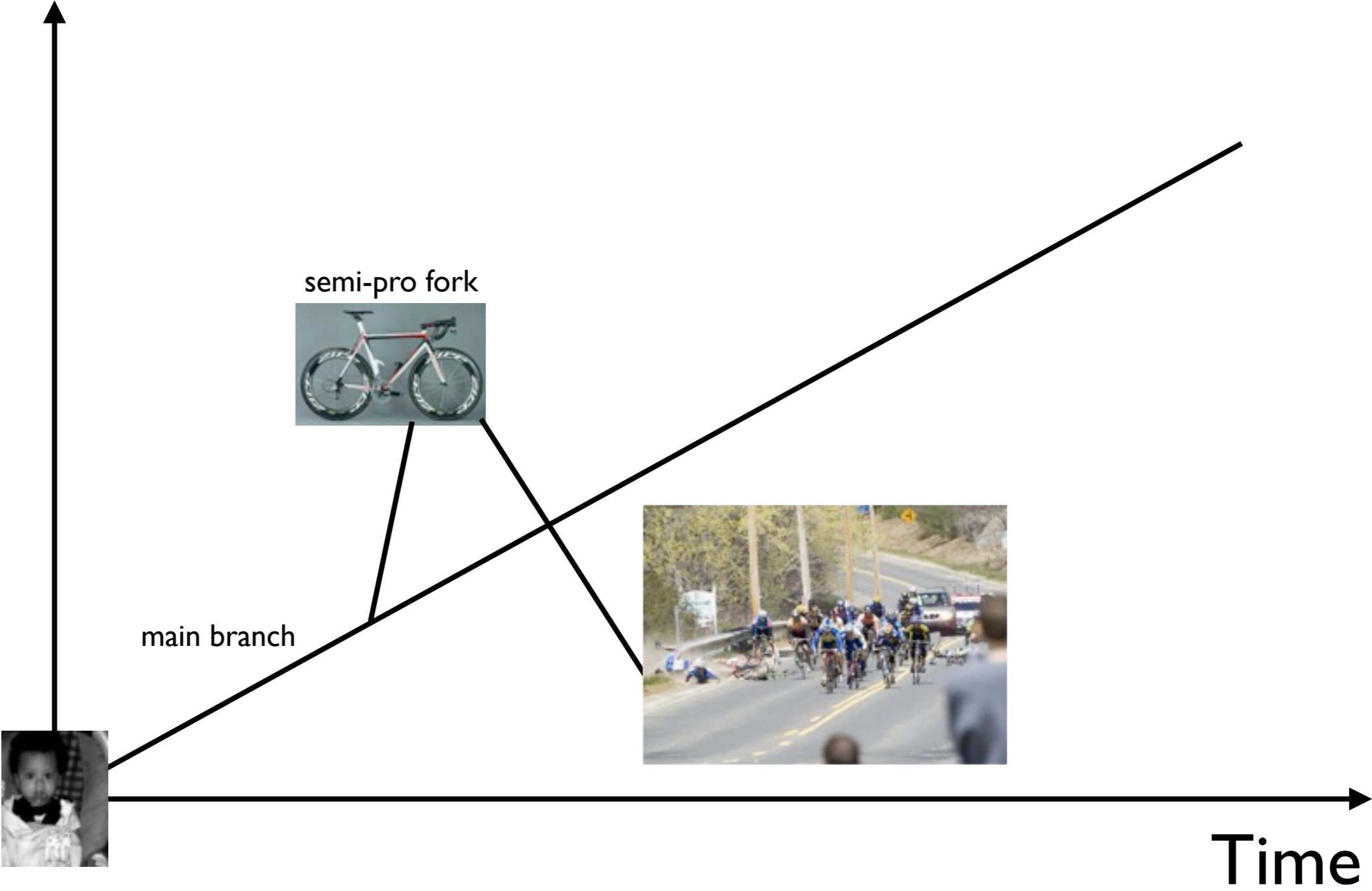


main branch

semi-pro fork

Time

Awesomeness



semi-pro fork

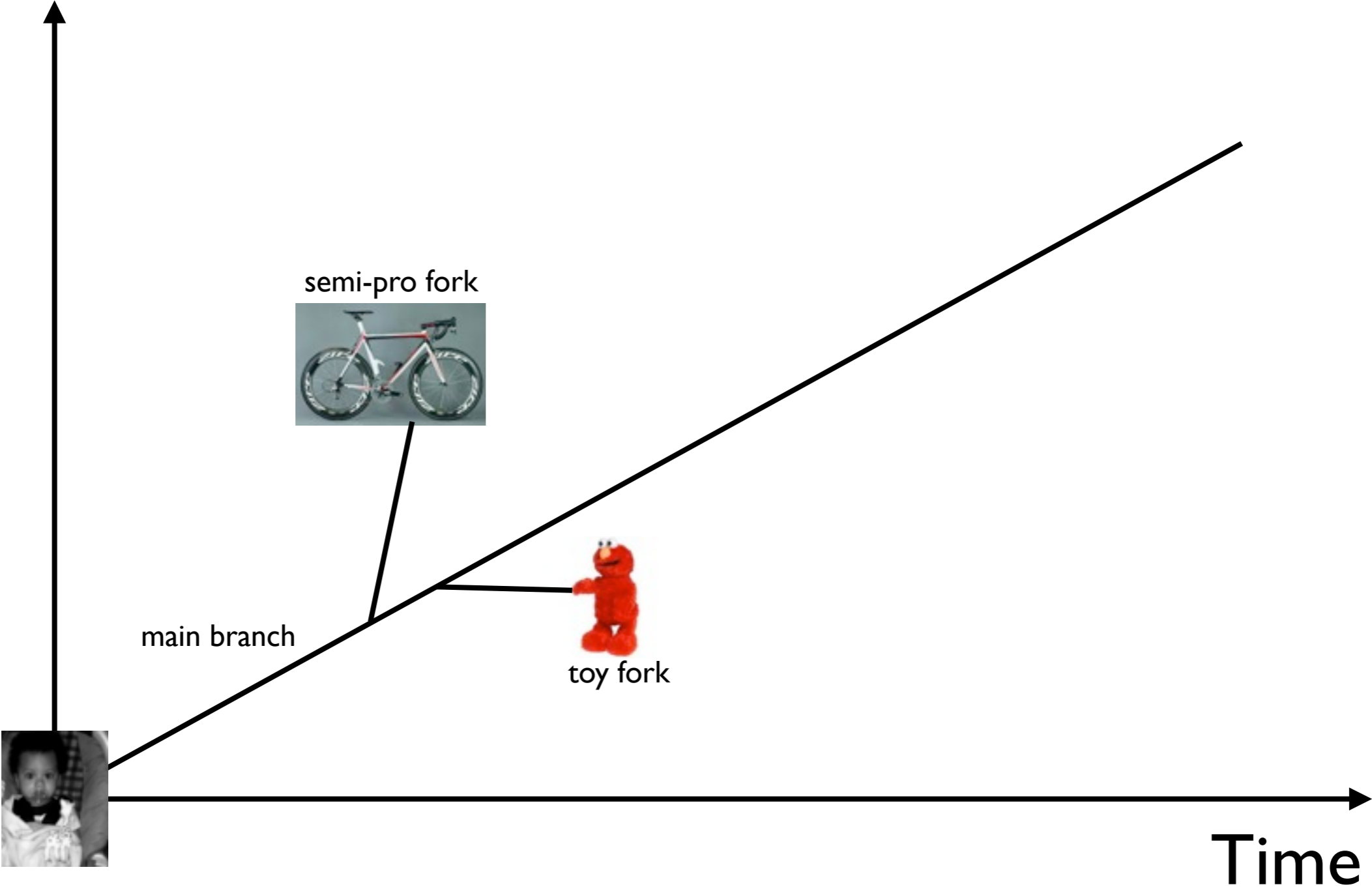


main branch



Time

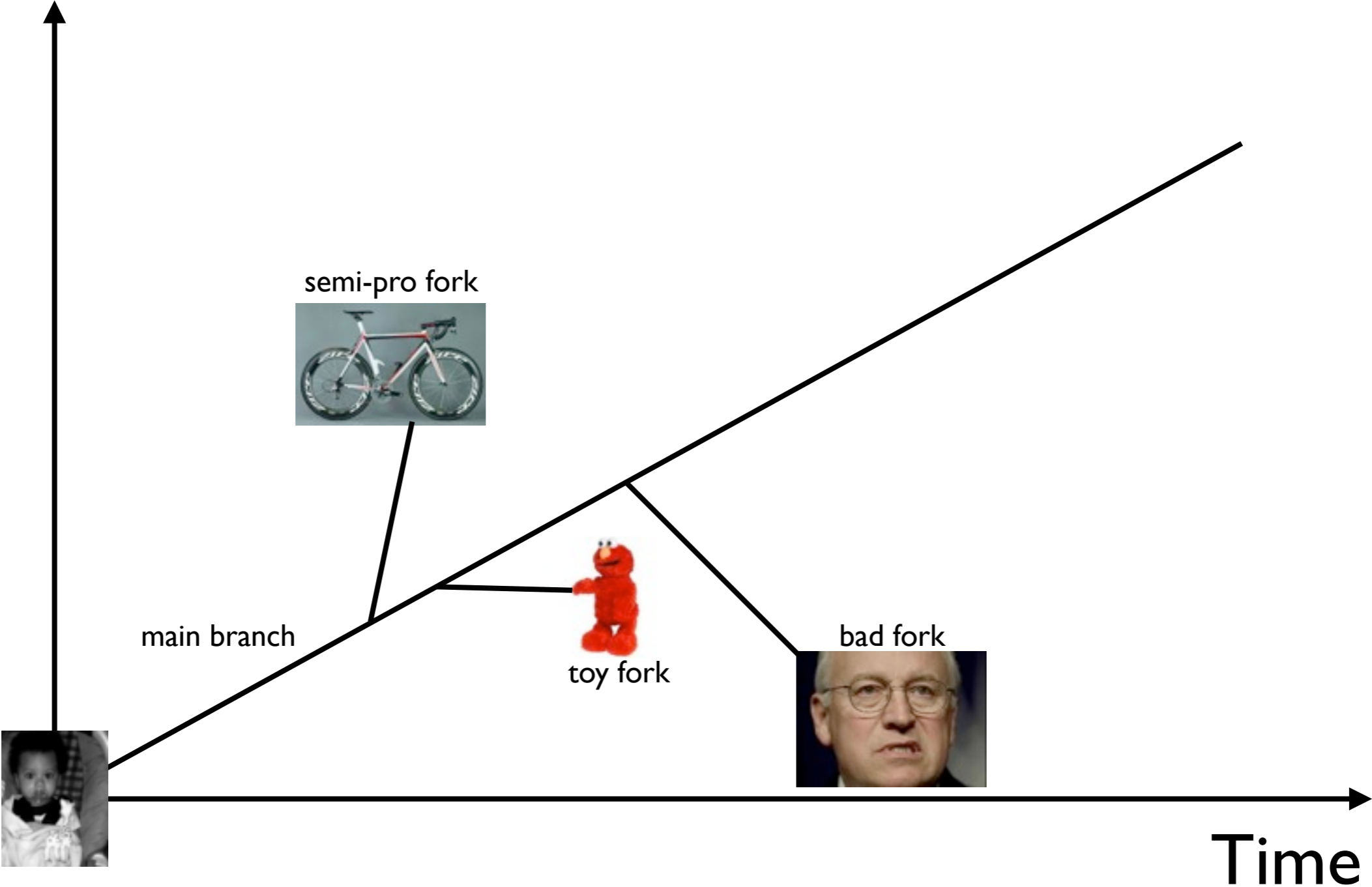
Awesomeness



main branch

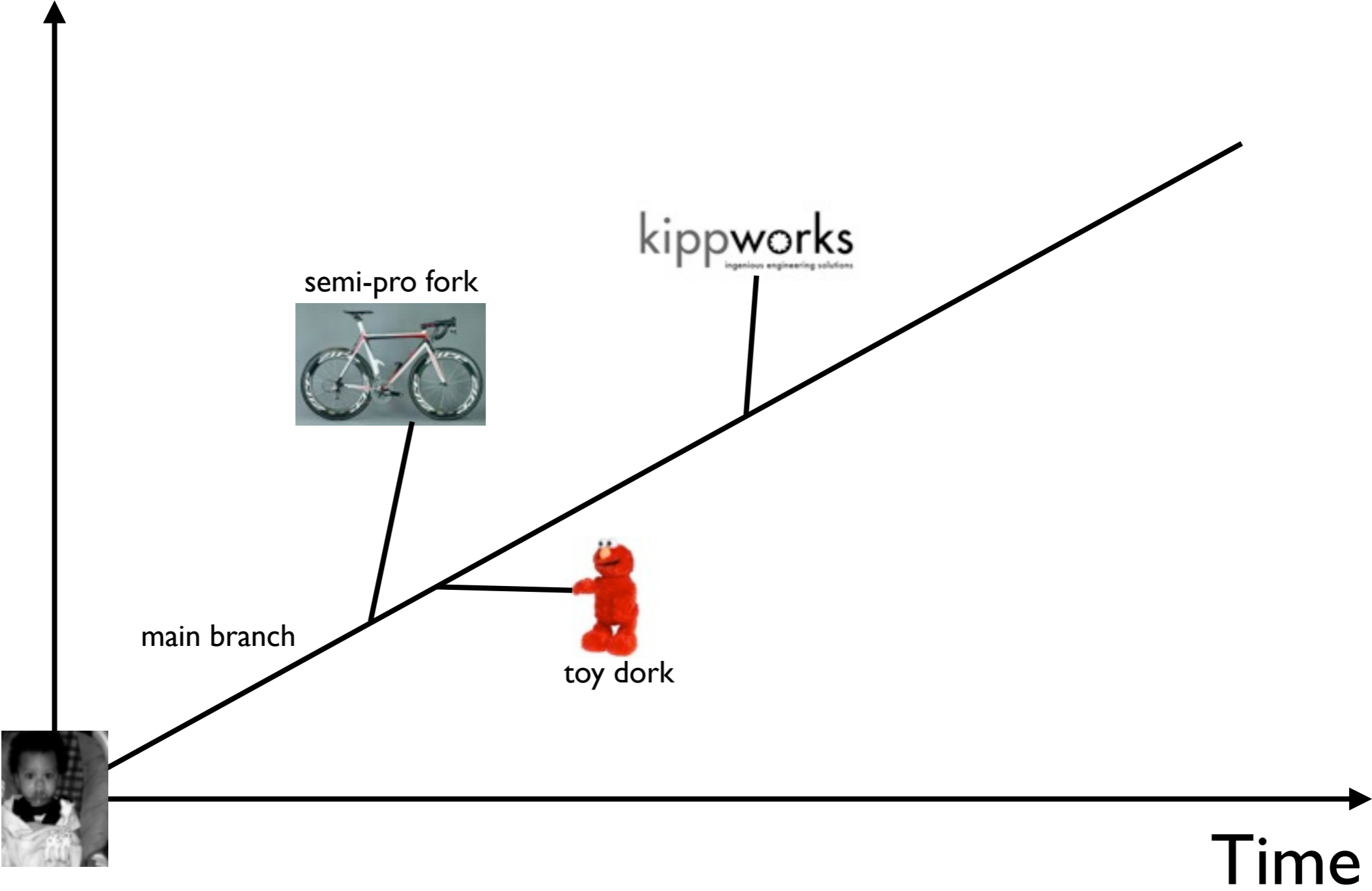
Time

Awesomeness

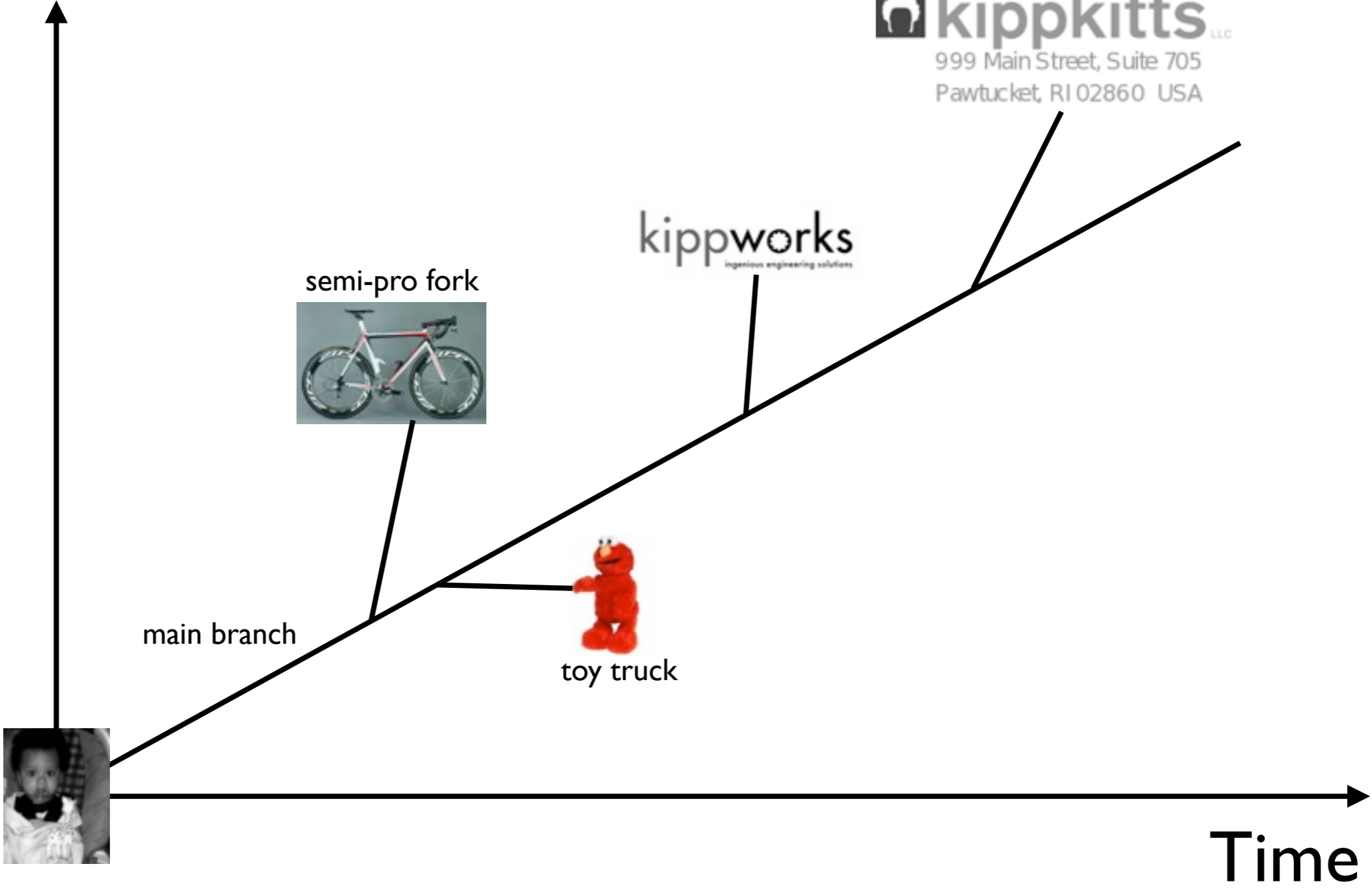


Time

Awesomeness



Awesomeness



Awesomeness

 **kippkitts** LLC
999 Main Street, Suite 705
Pawtucket, RI 02860 USA



b. July 31, 2011

Time

What is kippkitts?

kippkitts is about the hardware
for sketching in hardware

hard to find
technology

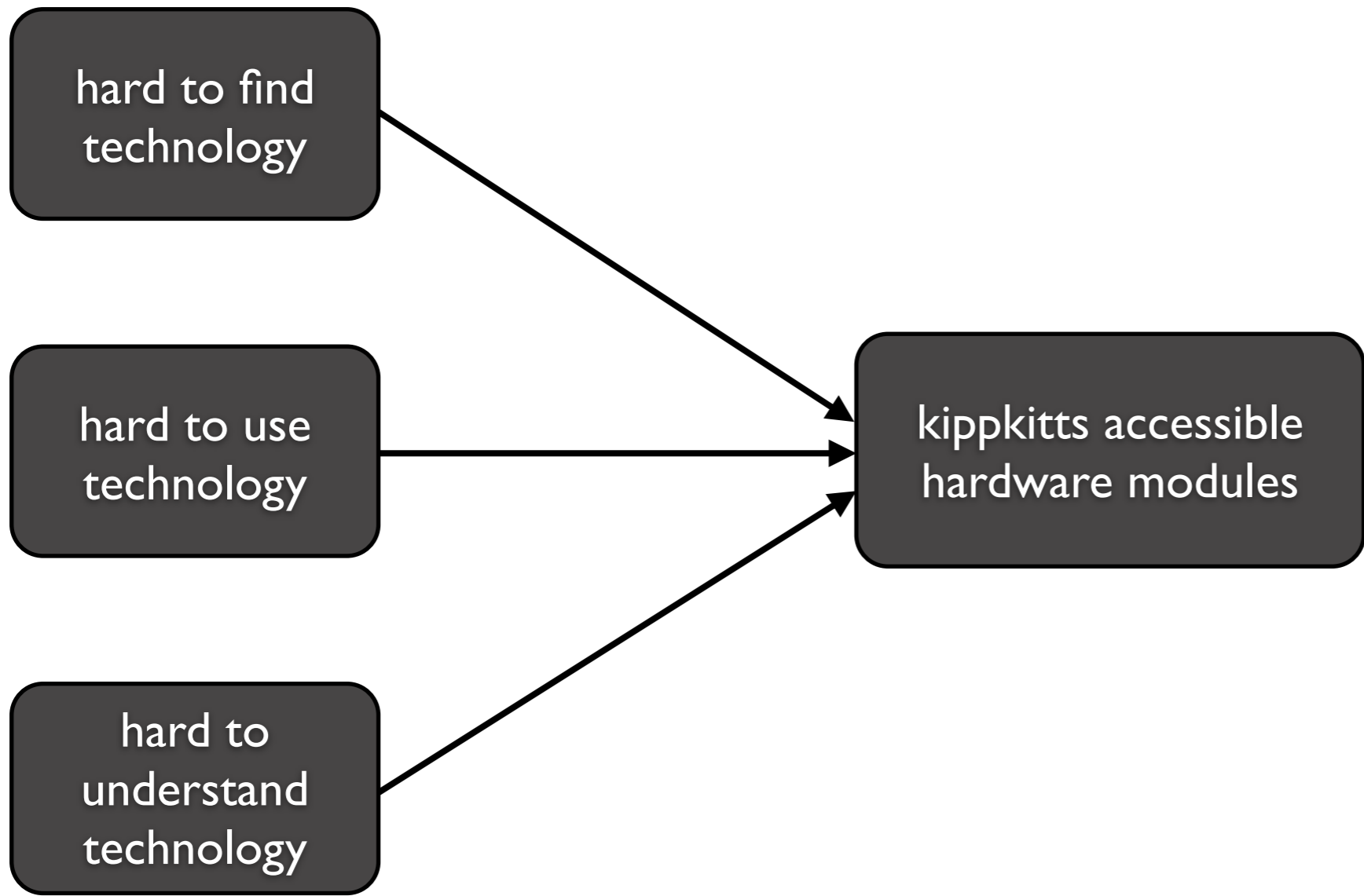
hard to find
technology

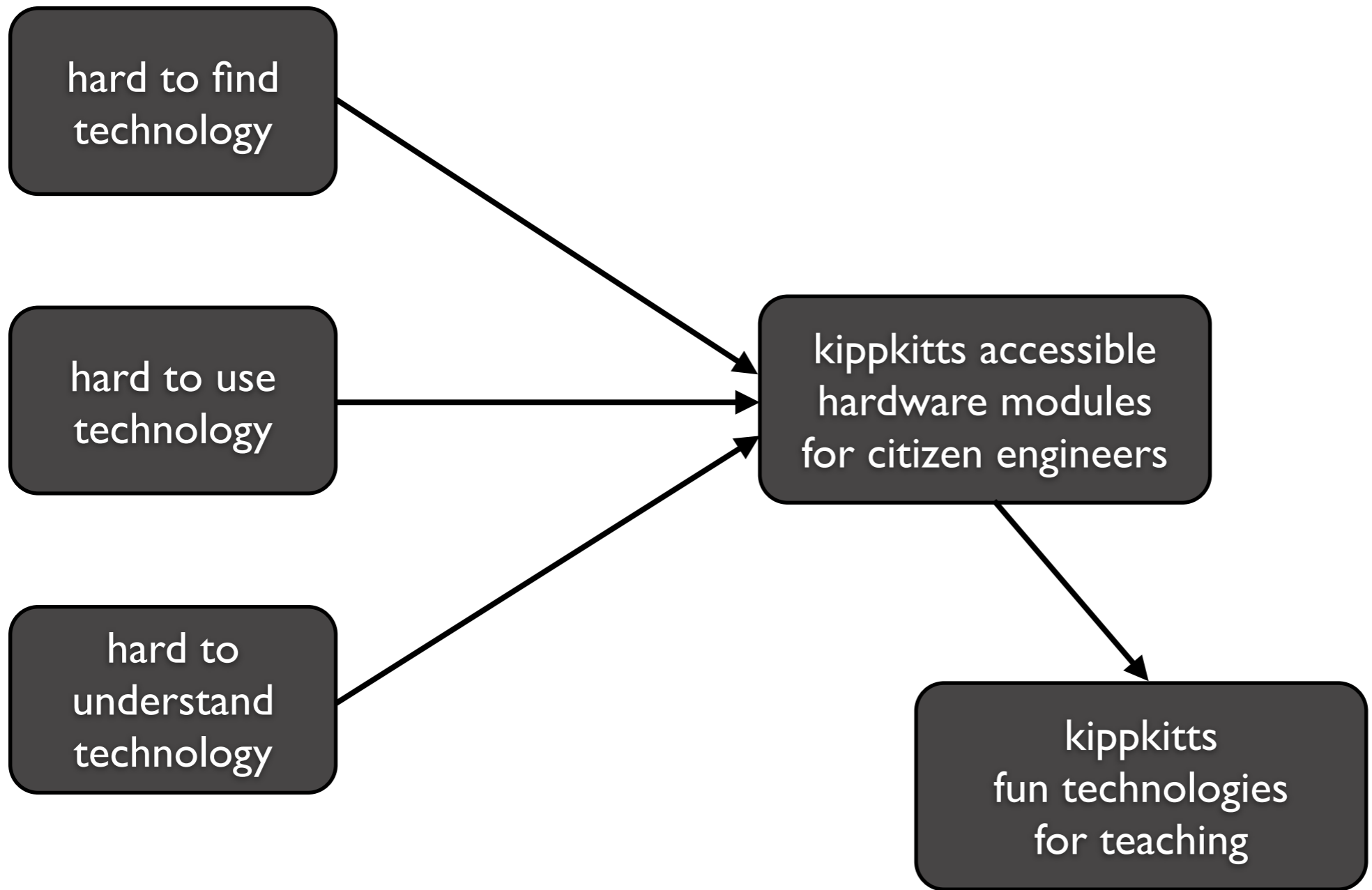
hard to use
technology

hard to find
technology

hard to use
technology

hard to
understand
technology





Current kitts:

Cardboard Hovercraft

Mini Biosphere: Aquatic

Mini Biosphere: Terrarium

Automatic Plant Watering System

Robotics

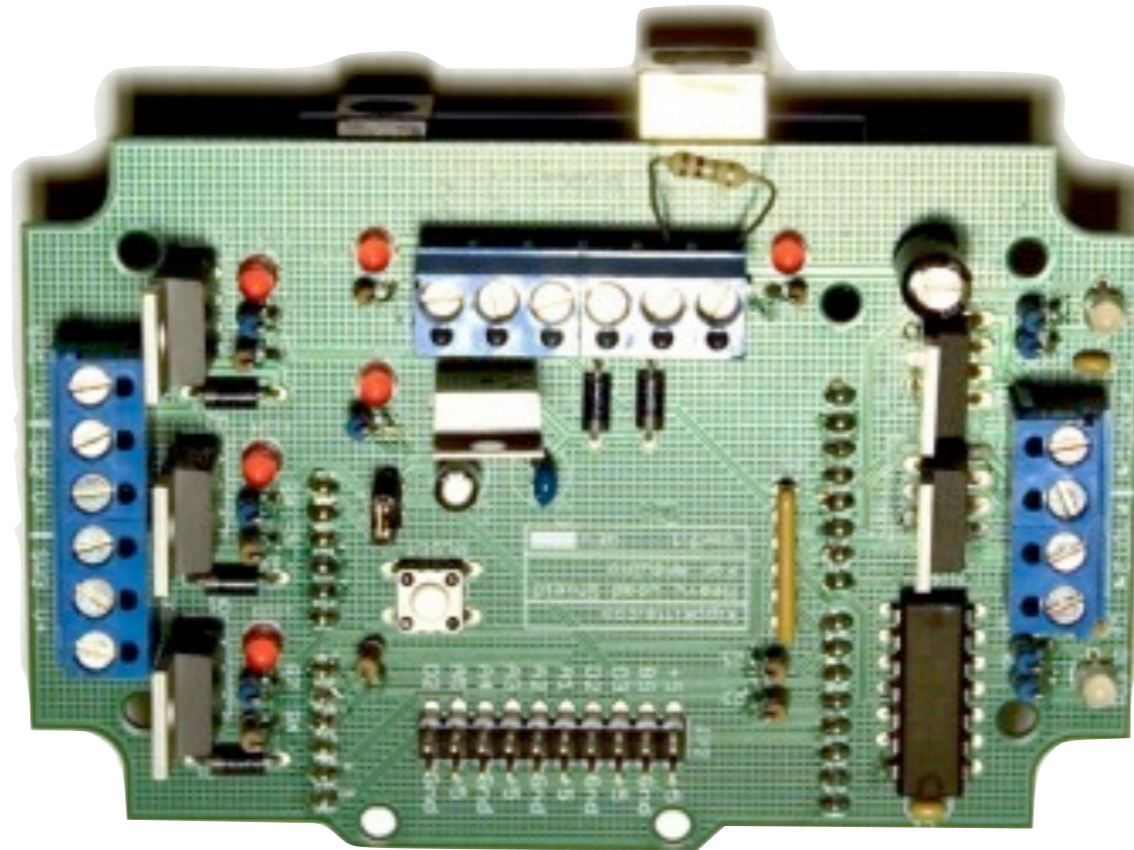
Heat-Pump

Audio Throwies

Pro-Shields for Arduino

And more!

Pro-Shields for Arduino: Dos-Tres





expanded upon to include a variety of designs and reach students in classrooms across the country.

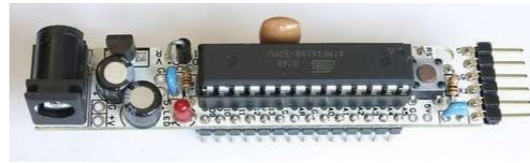
What is Bugbots?

Bugbots is a simple do-it-yourself robotics kit that teaches introductory skills necessary for electronics, mechanical construction, and programming while simultaneously fostering creativity and design concepts via the arts.

Kit of Parts:

Included Materials

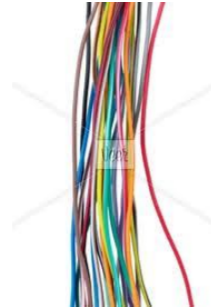
- RBBB Arduino Clone



- Multiple LEDs



- Assorted wires



- (2) FF-130SH-11340 servo motors



- 5-volt power supply
 - 3 AA Batteries



OR:

- Cell phone battery with leads

- Assorted foam board



- (1) Black
- (1) Red
- (1) Yellow or Green
- Sticky-felt paper



- Pipe Cleaners



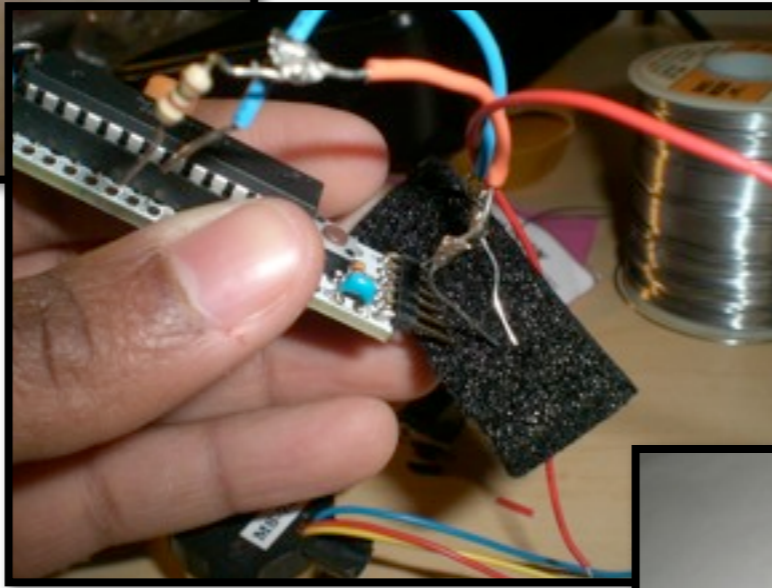
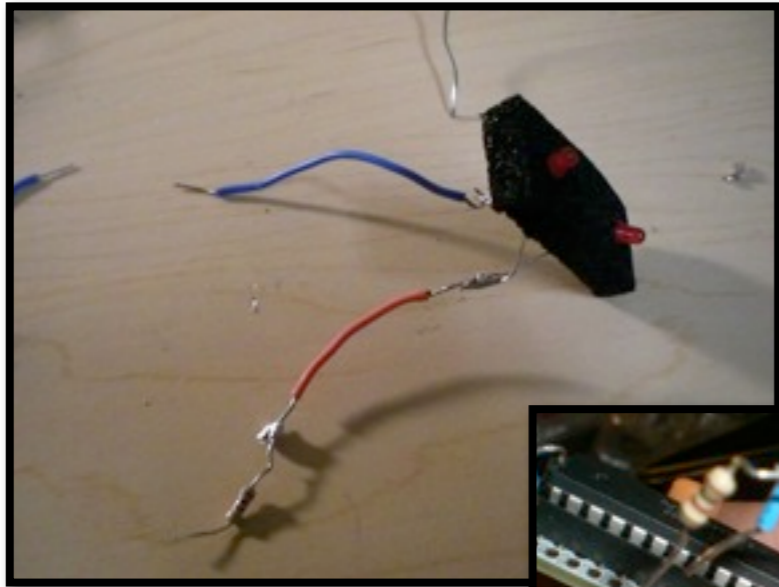
- Bug starter patterns
- (MAY NEED THINGS TO TRACE SUCH AS OVAL PLATFORM, BUTTERFLY, CIRCLE, BEE PATTERNS)
- (NEED TO SHOW HOW TO PUT IN POWER SUPPLY ONCE FIGURE OUT ☺)

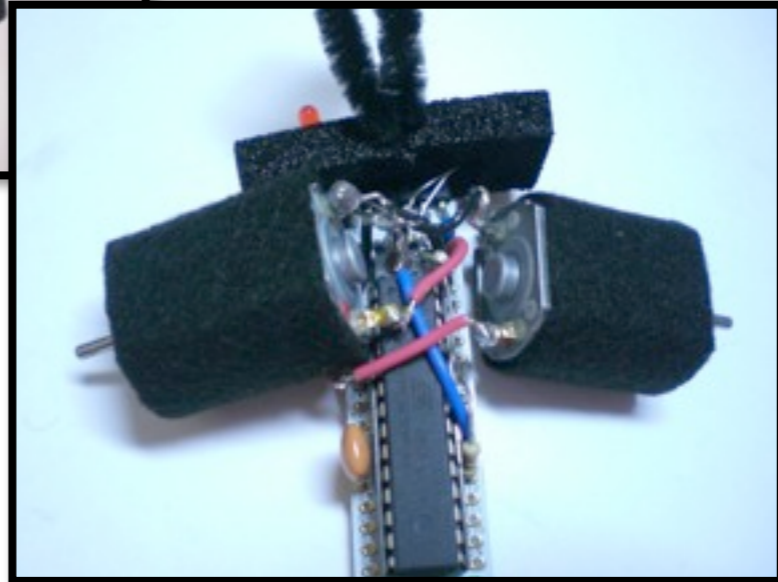
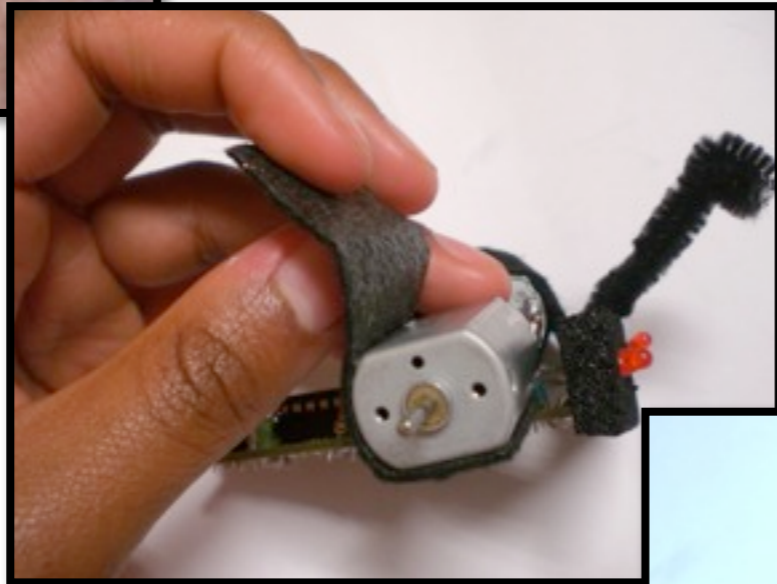
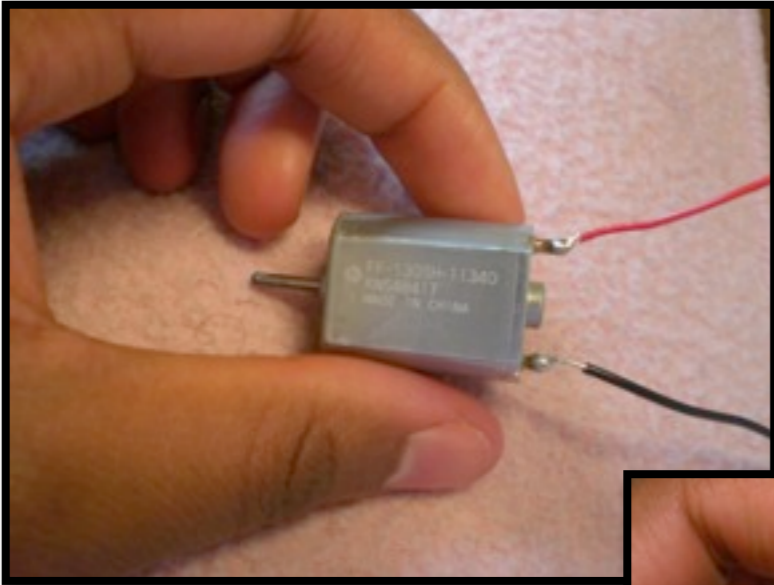
Around the house

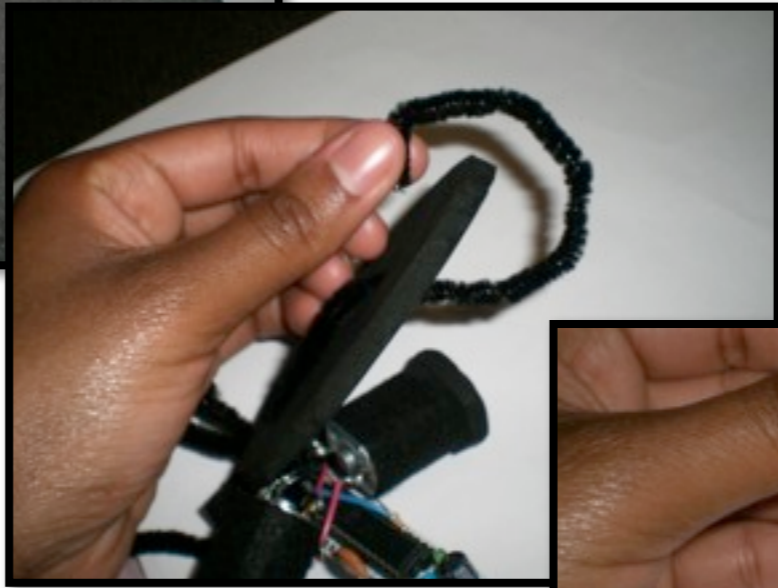
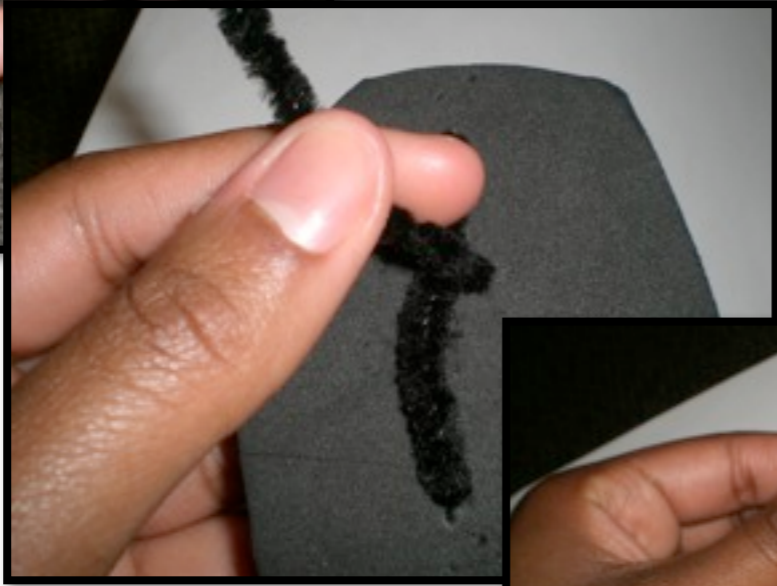
- Dryer sheet
- Markers
- Glitter glue, etc.
- Construction paper
- Large beads for wheels
- Adhesive putty
- Needle and thread

Tools

- FTDI TTL-232R USB to TTL serial Cable
- Computer with Arduino program
- Soldering iron
- Solder
- Heatsink
- Scissors
- X-acto knife or razor blade
- Wire cutters







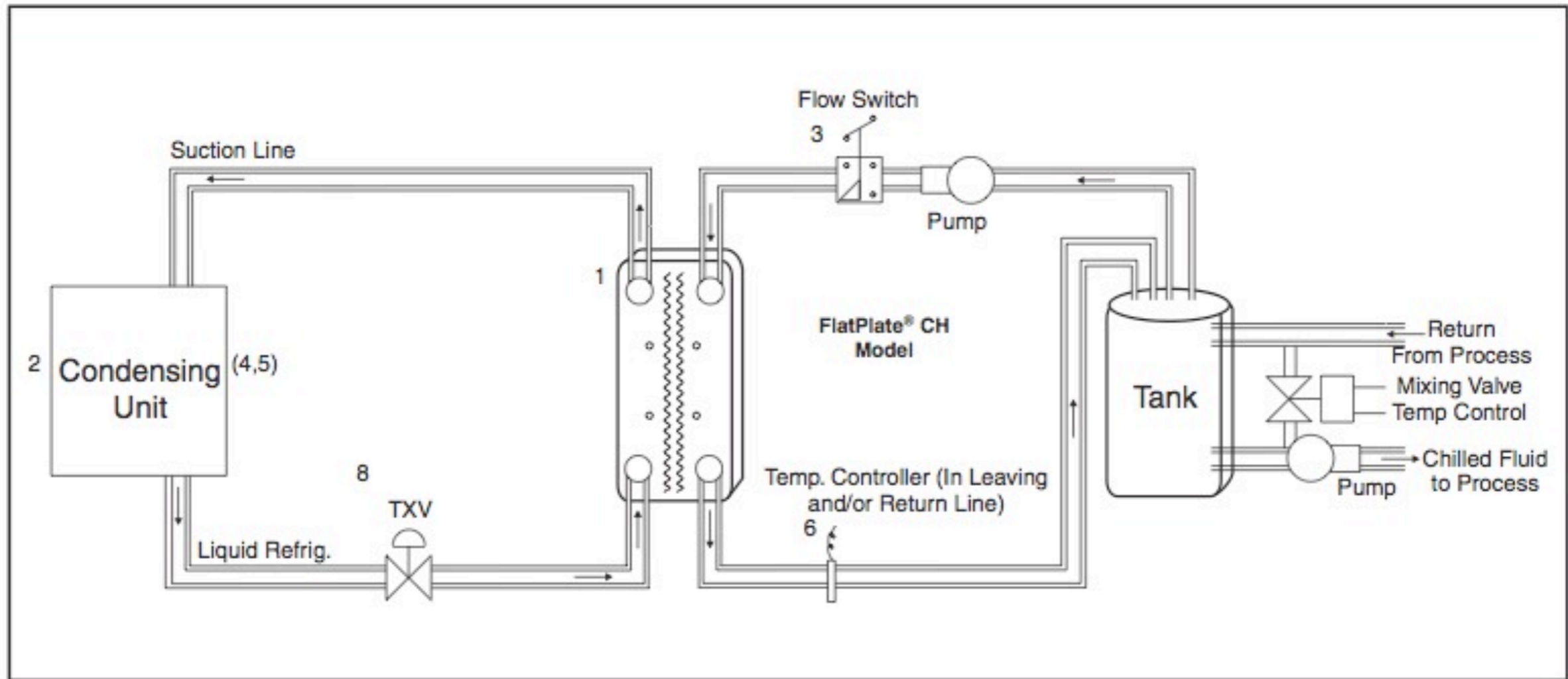


kippkitts heat-pump

- Engineers, inventors, industrial designers, students and others are faced with difficult challenges incorporating efficient cooling into their projects and products.
- Compact, efficient, easy to control modules do not currently exist to serve this market.
- The exponential growth of Peltier modules in this market illustrates this need, but they are an inefficient technology, and requires additional design of large heatsinks and power supplies.

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kippkitts heat-pump



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For those with access to the specialized skills and tools, incorporating efficient cooling into projects and products can still be expensive and time consuming and difficult.



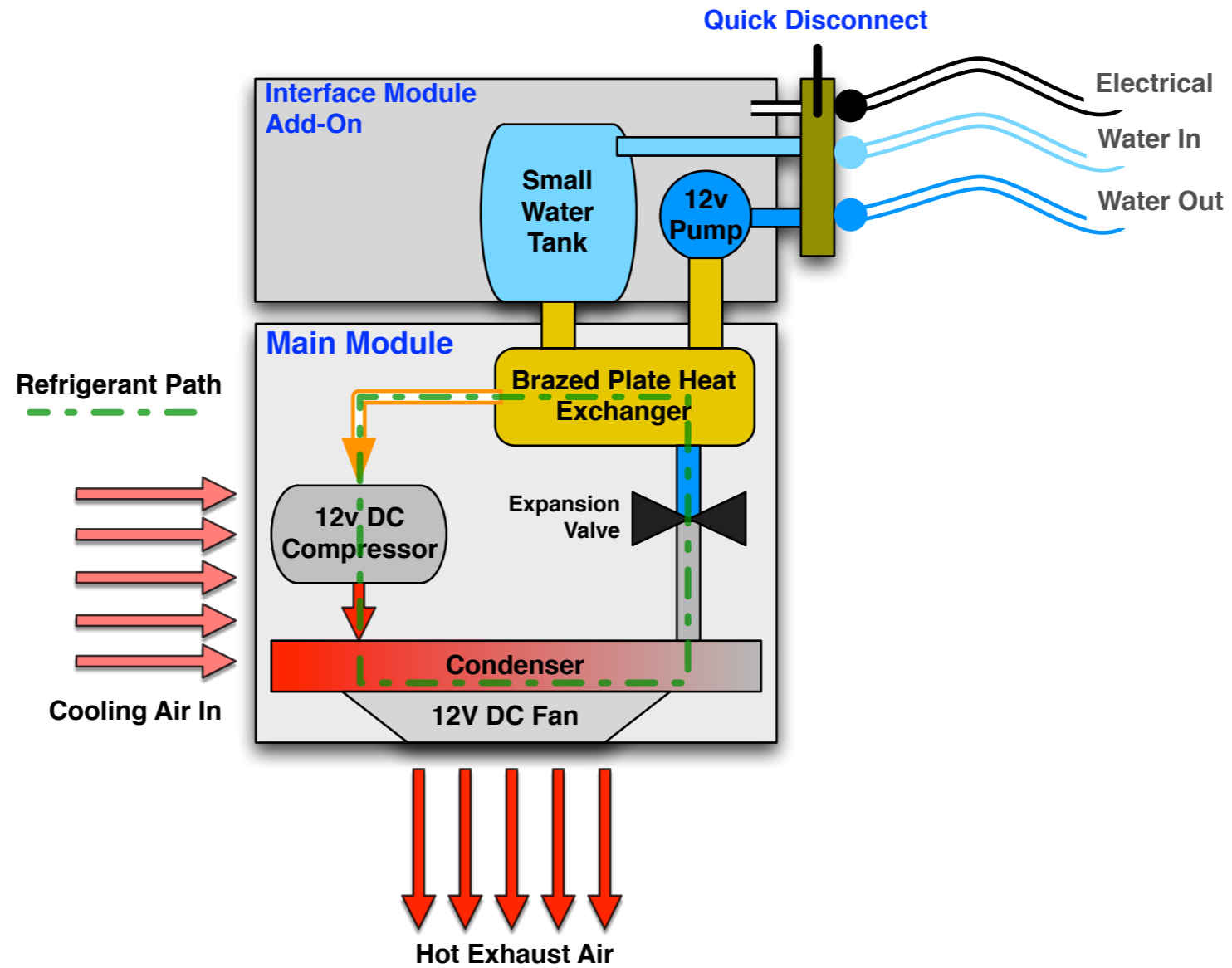
The ultimate All-In-One Brewing Machine, \$2500
Refrigeration professional was father of inventor.
<http://www.popsci.com/node/8916>



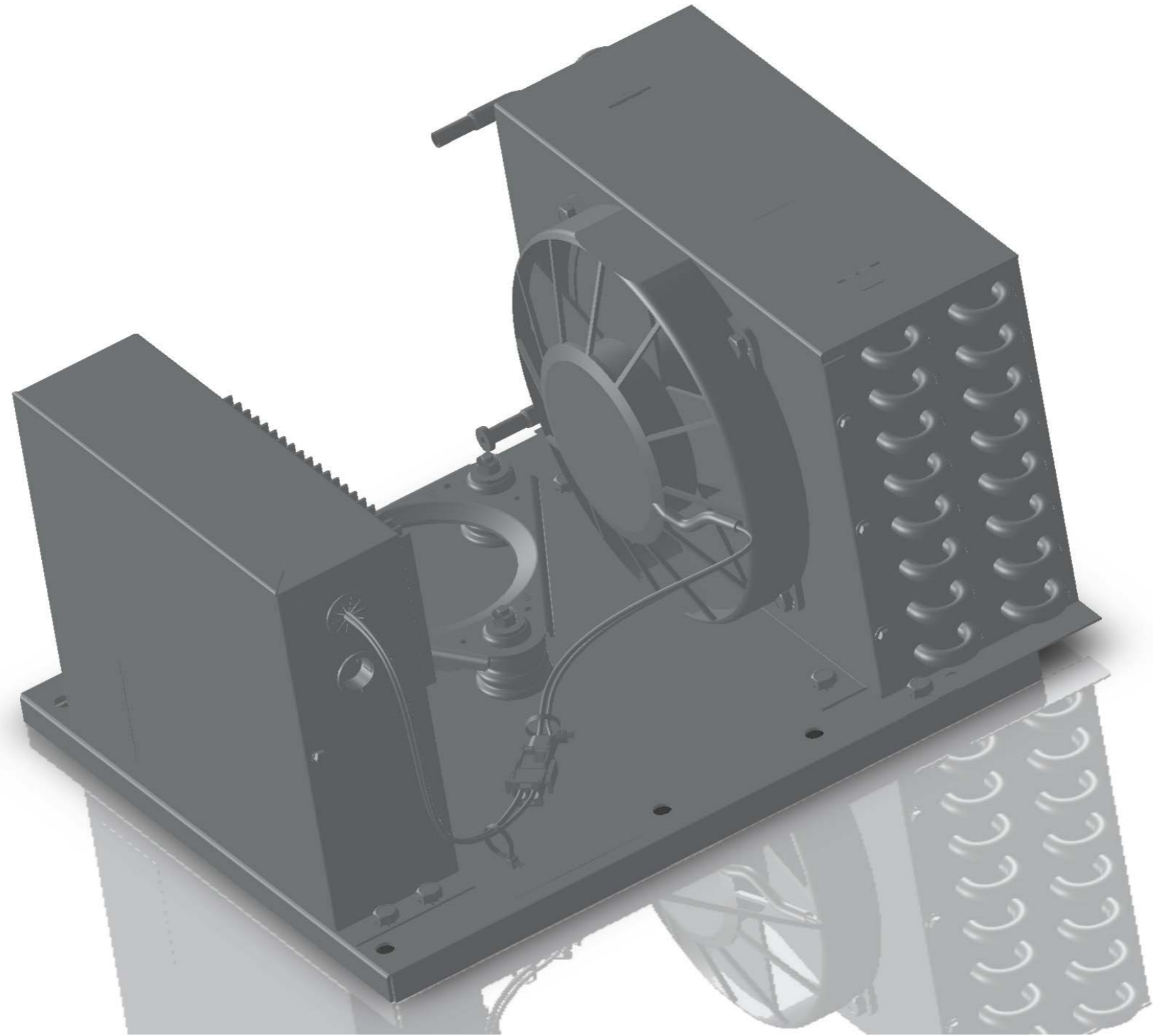
Leotus Home AC Prototype 2, \$2000
Refrigeration professional was local hired
consultant, components purchased at retail prices

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KippKitts
Cooling Engine Block Diagram
1500-3000 BTU Module



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For those without access to the specialized skills and tools for incorporating efficient vapor-cycle heating and cooling into projects, KippKitts introduces the ExaBreeze line of D.I.Y. kits.

These kits address the complexities of optimizing design, sourcing parts, assembling, and testing vapor-cycle cooling modules. Most importantly, charging these modules, the domain of licensed professionals, is now done at the factory.

Engineers, inventors, industrial designers, and students can now truly plug-and-play!

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Initial Kitt offering:

3 Sizes of Low Voltage DC Cooling/Heating Packs
and Associated Components for Implementing
Cooling & Heating Projects

- Mini Kit: 500-2000 BTU Pack
- Standard Kit: 2500-5000 BTU Pack
- Mega Kit: 5000-10,000 BTU Pack

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- **Mini Kitt Project Packs:**
 - Vibration-Free Wine Refrigerator, Multiple Zones
 - Aquarium Cooler
 - CPU Cooler
 - Personal Cooler
 - Car AC
 - DIY Temp Controlled Water Bath
 - Desktop Water Heater/Cooler

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- **Standard Kitt Project Packs:**

- Portable AC
- Dehumidifier
- Ventless Clothes Dryer
- Car AC
- Boat AC
- Desktop AC
- Fancy Window AC
- Mini-Split Heat Pump
- Shipping Container Retrofit for Community Refrigeration
- DIY Temp Controlled Water Bath
- DIY Beer Brewing Machine

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- **Mega Kitt Project Packs:**
 - Shipping Container Retrofit Home AC or Heat Pump
 - DIY Off-Grid Heat Pump

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