

6.25.14 Preview:

Highlighting Nine StartUptown and Urban Innovation 21/
PCKIZ Resident Companies



Rise of the Rest Road Tour with Steve Case
at StartUptown www.startuptown.org 412.400.7154



StartUptown



Atlantic magazine's senior editor, Alexis Madrigal, in a recent article placed StartUptown at ground zero, "...where Pittsburgh's problems meet its new solutions." Alexis challenged Pittsburgh by asking —

"Can Startups Help More Than Themselves?"

We think they can.

StartUptown's mission is the revitalization of the Uptown neighborhood.

We are creating a dynamic live-work entrepreneurial community that attracts a youthful, diverse, and progressive population from the tech, social, maker and arts communities.

In a network of urban spaces, collisions of diverse people and activity stimulate creativity. Open environments provide cross-pollination and the framework to create unique partnerships.

A creative cluster of activity spurs a desirable destination for living and working.

PHOTO: The Uptown neighborhood looking down Forbes Avenue toward Downtown Pittsburgh, PA.

LINK: Atlantic magazine: <http://www.theatlantic.com/technology/archive/2012/09/pivoting-a-city-can-startups-help-more-than-themselves/262832/>

StartUptown (SU)



SU founder Dale McNutt shuttered a corporate design firm after twenty-six years and decided to utilize his 13,000 sf building as the anchor of an entrepreneurial campus designed to spur the revitalization of his Uptown neighborhood. SU calls its approach “co-working plus,” referencing mentorship that is a critical component in our ability to help early-stage companies thrive — and Pittsburgh Central Keystone Innovation Zone (PCKIZ) benefits — grants, internship program, and access to PA tax credits.

With a population of 90+ and 36 companies at our 5th Avenue site, we are Pittsburgh’s first maker space, and the city’s first and one of the largest co-working sites.

StartUptown (SU) thrives at the intersection of innovation and neighborhood development, reinvigorating traditional community development models that need new approaches for our rapidly evolving economy and one that emphasizes both *people and place*.

The unifying element to all our work is the belief that creative activity facilitates both personal growth and inclusive economic development. We believe that:

- New industries, with their jobs, are the basis of our future economic well-being;
- An entrepreneurial culture is necessary to create the innovative industries of the future;
- Creativity is an essential component of and a spur to innovation; and
- STEM education, plus quality arts education and exposure to artistic endeavors, and a strengthened personal creative psychology are key to building a broad entrepreneurial culture.

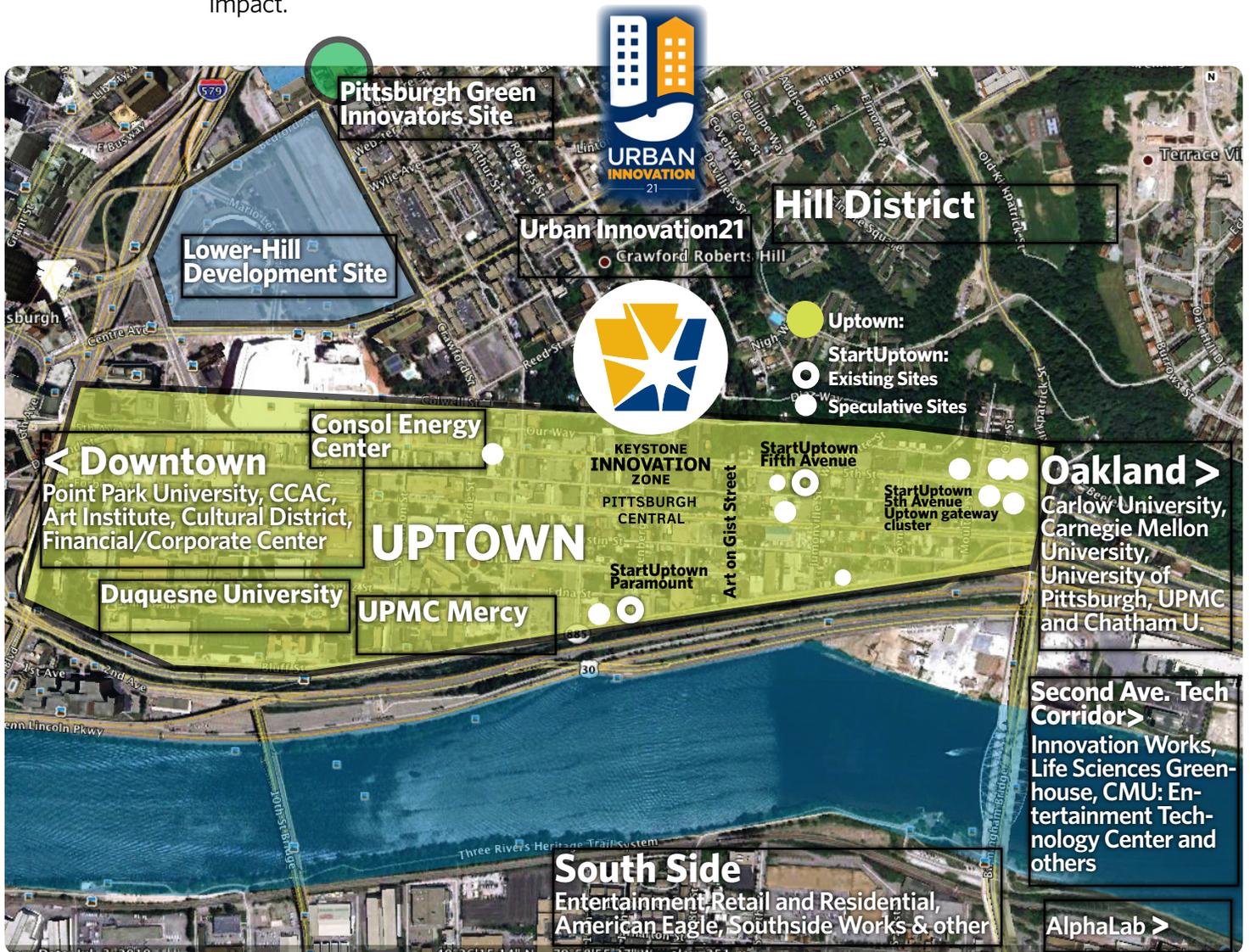


Photograph, L to R: UPTOWN — Artist James Simon on Gist St.; Hack Pittsburgh at the Children’s Museum; Consol Center concert; StartUptown (2); Uptown Partners community garden; Fifth Avenue School Lofts.

StartUptown: Location, Location

Located centrally between Oakland’s university-medical district and Downtown’s corporate-cultural zone, Uptown is in a unique position to absorb and catalyze Pittsburgh’s new economy. Three anchor institutions attract 3M+ students, employees, and visitors annually for education, healthcare, sports and entertainment. The community is served by high-performance public transit with bike trails and river walkways nearby, and easy access between all points North, East, South, and West.

Uptown is a nationally designated EcoDistrict® — a neighborhood laboratory for sustainable innovation — small enough to innovate quickly and big enough to have a meaningful impact.



StartUptown: Partners



Urban Innovation21 boosts regional economic development through 21st century innovation-driven entrepreneurship and is now home for the Pittsburgh Central Keystone Innovation Zone (PCKIZ).

The zone provides tech startups grant dollars, access to PA tax credits, and paid internships through the four universities in the zone. Uptown is located in the PCKIZ — a zone specifically placed to create a cluster of innovative activity in the transitioning Hill/Uptown neighborhood.

Urban Innovation21 is keenly concerned with the stagnation of local communities in contrast to the rapidly changing global market. We believe that a successful innovation economy can drive economic growth, but lasting regional progress happens when all communities are connected to wealth generators. Our work and our programs vary in scope and depth in order to effectively fulfill needs with smart solutions.



Uptown Partners of Pittsburgh (UP) is a non-profit community development organization of residents, business owners and institutions who are working together to build a vibrant Uptown community.

UP achieves its goals by pursuing an action plan that ensures a clean, safe and green neighborhood; rebuilds a mixed-income population by reclaiming vacant, blighted properties and encouraging new residential development; attracts new neighborhood retail and commercial business, while supporting existing business owners; fostering green, quality design in all development projects; and creating an environment where the arts flourish and are integrated into the urban landscape.



By the Numbers

The Mission of StartUptown is to advance the revitalization of the Uptown neighborhood by supporting inclusive entrepreneurial activity as a catalyst for redevelopment. We attract a youthful population to live-work and co-work from the tech, social, maker and arts communities to create a dynamic entrepreneurial district.

StartUptown:

- Incubated 48 start-ups since inception
 - 5 successful exits (acquisitions)
 - 6 securing significant follow-on funding
 - 24 generating revenue
- 90+ entrepreneurs working out of 16,000 sf of SU facilities on a daily basis
- 27 interns placed at 13 resident companies
- 3 interns secured full time positions with resident companies
- Over \$1.4M in grants, internships, and tax credits brought to resident firms through the PCKIZ
- Each Friday 25+ attend a HackPittsburgh collaborative workshop
- In July 2014, StartUptown expands to the historic Paramount Film Exchange
 - \$1.2M project with site owner, entrepreneur/photographer Alexander Denmark
 - SU received a \$250,000 grant through Allegheny County for new construction and a \$125,000 loan through the Urban Redevelopment Authority of Pittsburgh
- SU participants in a \$3M DOL Federal Innovation Grant to train workers for jobs in the new economy, "New App for Making It in America."



Highlighting Nine — A single page about each company you'll meet.

PAGE

- 8 **HackPittsburgh** — Pittsburgh's First Makerspace.

- 9 **Lechtzer Inc.** — Innovative Sensing and Optics.

- 10 **Hospital Cubical Curtain Maintenance** — Preventing Disease.

- 11 **BirdBrain Technologies** — Catalyzing Code and CS for Education.

- 12 **Collected** — Stop Redoing. Start Reusing.

- 13 **Innovesca** — Maximizing Nutrition Per Bite.

- 14 **Imagine Careers** — Top Talent. Great Careers.

- 15 **NoWait** — Stop Waiting. Get In Line from Your Phone.

- 16 **WebKite** — Live Data. Changing the Equation.



Pittsburgh's First Makerspace— Deconstructing and Understanding Objects and Systems

<http://www.hackpittsburgh.org/>



HackPittsburgh

Founded by StartUptown's first technology entrepreneurs Nick Pinkston and Steve Klabnick in 2008, — *'Hack' is Pittsburgh's first maker-space.*

About:

HackPittsburgh is a non-profit, community-based workshop, that allows members to share skills and tools to pursue creative projects. The membership is open to everyone but typically comprises inventors, engineers, scientists, programmers, hobbyists, artists, roboteers, families, entrepreneurs, and arts and crafts enthusiasts. The focus is on collaboration, education, and community outreach.

Hack works in the context of deconstructing and understanding objects and systems and re-purposing existing materials for new and innovative uses.

Events every Friday night, are open to the public, and usually free. Hack hosts several outside groups who meet in the ground-floor space — whose events are also open to the public.

Activity / Projects:

HackPittsburgh learning opportunities engage a broad population: Robotic Operating Systems; to Analog Game night; to an Oscilloscope Intro for Beginners — a 3D printing demo and a table top Tesla Coil — partnering with the Children's Museum to create its first Mini-Maker Faire in 2012 — to a digital version of a pendulum clock.

Each "Council" (the governing body of Hack) sets the organization's tone and direction. Several earlier members went on to Brooklyn to work for 3D printer manufacturer, MAKERBOT.

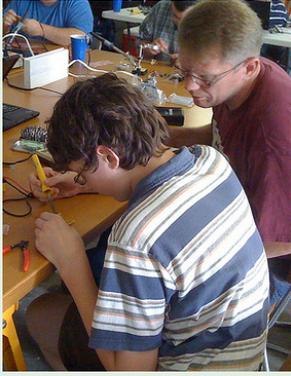
Project — PITTMESH: Build the Future of Connectivity in Pittsburgh

Hacker Adam Longwill: "PittMesh is a community-owned wireless network in Pittsburgh, PA constructed by enthusiast volunteers and guided under the auspices of META MESH. PittMesh currently has 5 nodes online. "Private mesh" or public internetworks are independent of a central supporting infrastructure.

[The global project hopes to supplement the current infrastructure to create a secure, independent network that can operate under any condition including natural disaster or general failure of existing infrastructure.]

The primary goal of PittMesh is to show that an inexpensive mesh net is feasible from off-the-shelf computer components in the real world.

There seems to be an urge with other mesh net projects around the country to create networks from higher end devices, power boosting hardware, and fancy antennae. It's Adam's belief that for a mesh network to become useful, usable, and ubiquitous, the point of entry needs to be low enough so that anyone can obtain the proper parts and jump on the network in a matter of hours. The primary goal is bigger than setting up a meshnet in Pittsburgh but rather to invent a documented process to easily implement a wireless mesh network that is resistant to natural disasters, censorship, and promotes anonymity by allowing for some daily connectivity tasks to be done away from the Internet.



THE CREATIVE COMMONS

Creating an entrepreneurial culture starts in preschool and ends with the realization that each space we inhabit is a living space for "Making"—from Picasso's living room, to pie-baking in the kitchen; from art studio, to research laboratory, to automated manufacturing floor — this work, whether propelled through chemistry, physics, biology, creative arts or psychology, is all about making and extending our human boundaries.

It's not just about STEM education. It includes quality arts education and exposure to artistic endeavors, and a strengthened personal creative psychology — all working together to build a broad entrepreneurial culture.

DALE MCNUTT, STARTUPTOWN



Innovative Sensing and Optics for Government and Industry

<http://lechtzer.com/wp/>

Lechtzer Incorporated

Lechtzer Inc.

Lechtzer Incorporated

Office:

1942 Fifth Avenue
Pittsburgh, PA 15219

Phone: 412.417.9420



SENSIT® PORTABLE METHANE DETECTOR (PMD)

Natural Gas Utilities attempt to survey as efficiently and reliably as possible. Lessure's PMD has demonstrated among the best performance and **the best cost/performance ratio of the new techniques.**

OPTICAL METHANE DETECTOR

As a new product for Heath Consultants, the OMD(TM) **was named as the hottest new instrument of the year** in 1998 by Gas Utility and Pipeline Industries. The OMD has been adopted by customers throughout the world becoming a preferred instrument for high speed, wide area vehicle leak surveys.

NITROUS OXIDE MONITOR

The N2O monitor we helped patent and develop is accurate, inexpensive, and makes real-time continuous monitoring down to 5 ppm a reality.

NON-INTRUSIVE LOAD MONITORING

Lechtzer is involved in cutting edge R&D to develop novel analysis and signature identification for electrical events relevant to risk reduction through early fault detection and for the purpose of energy conservation.

Lechtzer, Inc was founded in 2007 by Harold Lessure, a Carnegie Mellon University alumnus and former faculty member of the ECE Department at CMU. Harold explains, **"We focus on the invention and development of practical robotic technologies and automated solutions for defense, homeland security, oil, and gas markets and customers both nationally and internationally.** Our business model stresses invention with a goal of product sales and technology licensing. We develop patents for novel systems, sensing, and communications applications and have licensed technologies to large national and international companies and consortia."

"We design rugged products that work."

Optics:

In the area of optics Lechtzer has assembled an optical device prototyping shop (*at StartUptown*) with world class talent to allow for rapid experimentation in a wide variety of materials in-house research and development.

Electronics:

Lechtzer has the capability to design, simulate and prototype a wide variety of research grade and commercial grade electronics. Lechtzer activities are geared towards the development of novel detectors and measurement systems for new commercial or research instruments.

Systems:

Ultimately a system's capabilities are the result of how well distinct subsystems interact to form a whole. Bringing a product to market means having the broad range of knowledge and experience required to efficiently create structure and achieve interconnectivity between subsystems.

Mechanical Design:

An integral part of device development is the mechanical design. Basic design tools are available for the production of novel prototypes including 2D and 3D CAD. Lechtzer has developed a number of research and commercial prototypes which have gone into limited and worldwide production and distribution with minimal design change.

Image below: Lechtzer product laboratory on the ground floor at StartUptown.





Saving Lives by Reducing Secondary Infection

<http://www.cubiclecurtainmaintenance.com/>

Hospital Cubical Curtain Maintenance (HCCM)

MORE INFORMATION:

Cubicle Curtain Maintenance
P.O. Box 99985
Pittsburgh, PA 15233

1-877-98-CUBICLE

info@cubiclecurtainmainte-
nance.com

HCCM is a HUBZone,
minority-certified,
veteran-owned company that
provides complete cubicle
and privacy curtain service
for hospitals and clinics.

HCCM saves lives through the cost-effective application of technology reducing the spread of secondary infections in hospital rooms.

Problem:

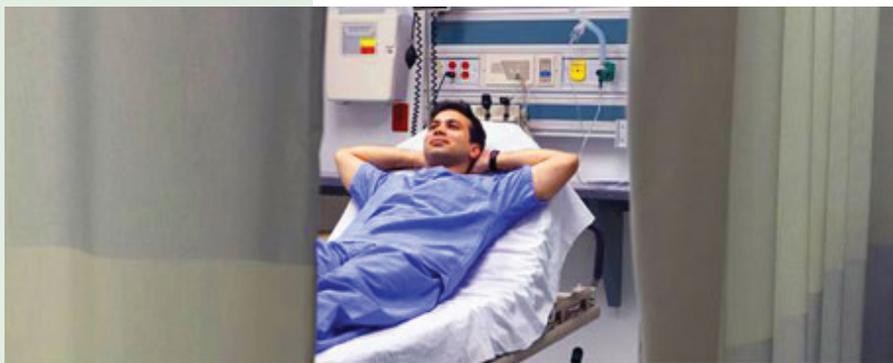
Hospital Acquired Infections are one of the most deadly, and costly problems that every hospital faces. During a hospital stay a patient comes into contact with numerous surfaces that catch harmful bacteria and germs. Privacy curtains in shared rooms are a major conduit for these harmful agents spreading from one patient's area to another's. It extremely difficult and costly for a hospital to maintain germ free curtains. Manual processes that rely on pen and paper are labor intensive, prone to human error, and impossible to track in real-time. Current technological solutions, such as bar codes, also have limitations that prevent hospitals from delivering the required safety levels.

Our Solution:

We have developed a Radio Frequency IDentification (RFID) system that is encapsulated in a washable packaging and managed by a web-based platform. The system gives hospitals a cost-effective method to track the history and status of all their curtains through a single web interface. This provides hospital staff with a reliable way to insure that privacy curtains are properly maintained and regularly changed, reducing the spread of secondary infections.

Market Opportunity:

We provide our RFID system as a service to hospitals. Based on discussions with the Veterans' Administration, we have determined that our service would be attractively priced between \$30K-\$60K per year depending upon the size of the care facility. With over 1700 VA medical centers and 5700 registered hospitals in the United States we have over a \$300 Million/year market opportunity.





Robots Designed for Computer Science Education

<http://www.birdbraintechnologies.com/>



BirdBrain Technologies

BirdBrain Technologies LLC was founded in 2010 by Tom Lauwers. For the last five years, Tom had been working on a Ph.D in the Carnegie Mellon Robotics Institute's CREATE lab. His work there focused on the creation and design of several robots, robot kits, and other electronic devices. His Ph.D describes a design process for how to align the capabilities and interface of these devices to a specific educational context.

Tom's research process involved an iterative design cycle involving the creation of hardware and software, partnering with educators, pilots in real educational settings, and the evaluation of those pilots to create design parameters to feed into the next cycle. This process has been successful at creating educationally relevant tools in several different educational settings, including Finch and Hummingbird, BirdBrain's first and third products.

It is the goal of BirdBrain Technologies LLC, to take these research projects and sustain them by making them useful to the educational community. For each product released through BirdBrain Technologies, we create documentation, sample curricula, and tutorials to allow parents, teachers, and students to get up to speed with the technology quickly, so they can focus their time on using the device in creative and fun ways.

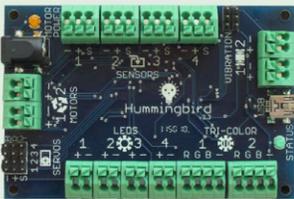


CONTACT INFORMATION:

Tom Lauwers
Email: tlauwers@gmail.com

M.S. and Ph.D in Robotics, and B.S. in Electrical and Computer Engineering — Carnegie Mellon University

Robot Diaries aims to develop an alternative activity to attract students who may be interested in building robots but are turned off by competition. The current program revolves around designing robots to express and communicate emotions. Robots are built with servos, motors, sensors, LEDs, and the Hummingbird, a microcontroller specially design for the Robot Diaries program. The robots are programmed with an iconic scripting language.



Adaptive Braille Writing Tutor aims to create a tutor to teach Braille writing to blind children in developing countries. I have been involved with the project since early 2006, and developed version one and two of the hardware input device used by the tutor. Fellow RI Grad Nidhi Kalra was responsible for initiating the project, developing the software tutor, and conducting the first pilot of the project.

Finch Loan Program:

The Finch loan program is our contribution to this year's Computer Science Education Week and Code.org's Hour of Code initiative. We are loaning out hundreds of Finch robots for use by school districts over the next year.

The program kicked off in December, 2013, just before the official start of CS education week (December 9 to 15). We are loaning out six sets of 50 robots to over 70 school districts and other organizations around the country. These robots will move to a new location every month through at least January 2015.



All together, we anticipate that the robots will be used by 15,000-30,000 students.

Our goal is to catalyze coding and computer science learning experiences for students who might not ordinarily have the opportunity to program a robot as part of their typical classroom experience.

The program is completely free for participating schools; we are covering all shipping costs and will replace any robots that break during the program (we are confident in the Finch's robustness!).

To ensure that schools and teachers are prepared to use the Finches when they arrive, we are creating a number of sample activities in the spirit of the one hour of code project. Our activities will take anywhere from 30 minutes to several hours to complete, and are designed to be accessible to novice programmers. Additionally, we are sending two robots to each participating organization at least two months in advance of when the main batch of robots is scheduled to arrive to ensure that there are no software or IT glitches on school computers, and to allow teachers participating in the program to practice the activity.



Stop Redoing. Start Reusing. Uncover your best work, as you work.

<http://www.collected.io/>



Collected

Collected delivers contextually-relevant content from documents and presentations in your cloud storage accounts as you type.

It makes the apps you use to create content, like Microsoft Office and Google Docs, aware of all your other work — suggesting related content from documents and presentations — helping you uncover, reuse, and get inspiration from all your other work.

Connect your cloud-storage accounts and download the add-ins for Word, PowerPoint, and Google Docs. Then, as you type, Collected unobtrusively shows the most related content in the sidebar. With one click you can drop suggestions into your current work or view the original. Collected delivers the content you need, right when and where you need it.

Target Market

The total cloud-productivity market is currently estimated at over \$3.9 billion and is predicted to grow to \$21.6 billion by 2018. Collected is initially targeting individuals working in the Marketing, Management Consulting, and Grant Writing industries who often need to leverage prior client and project work. The technology has additional applications in industries such as Legal, Financial, and Informational Technology services among others.

Team

Steve Cotter worked in management consulting and marketing at both small firms and large corporations before founding Collected. After building the first several prototypes himself, he recruited Amanda Kroft, who has been developing software for over ten years, to help with development. Steve and Amanda hold advanced degrees in Computational Mathematics from Duquesne University and wrote theses in the area of Natural Language processing.

Activity

After completing the AlphaLab startup accelerator in late 2013, the Collected team focused on development of a production-ready application. In late May, they launched a public beta to evaluate features, gather infrastructure requirements, and assess scalability. The team is also testing a business version with two management consulting firms. After completing the beta and incorporating user feedback, the team will relaunch a subscription-based version of Collected for both individuals and businesses later this year.

Supported Apps



TEAM:

Steve Cotter
Founder and CEO

Amanda Kroft
Lead Developer

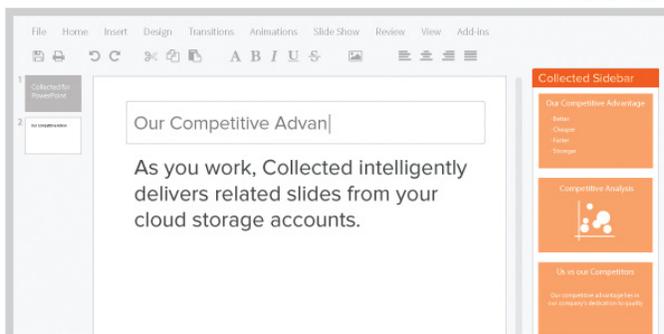
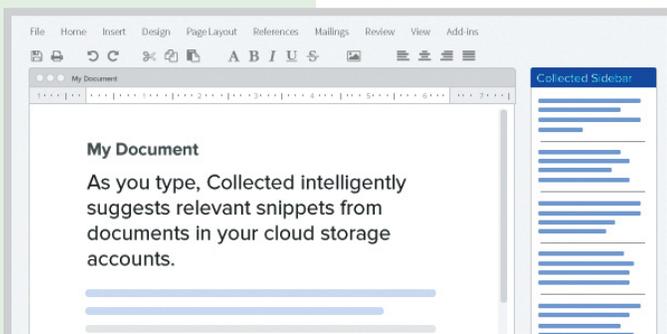
Ketian Cui
Software Intern

FUNDING HISTORY:

- AlphaLab
- Innovation Works
- Carnegie Mellon Open Field Entrepreneurs Fund

CONTACT US AT:

steve.cotter@collected.io





Maximizing Nutrition Per Bite by Transforming Underutilized Plants into Nutrient Rich Ingredients

<http://www.innovesca.com/>



Innovesca

FACTS:

- Founded in 2012
- Headquartered in Pittsburgh, StartUptown
- Spin-off of Carnegie Mellon University
- Technology funded by the Gates Foundation and the National Science Foundation

CONTACT US AT:

info@innovesca.com
304.641.6410
1936 Fifth Avenue
Pittsburgh, PA 15232
innovesca.com

Innovesca was founded with a dedication to improving global nutrition through food innovation, while enhancing agricultural sustainability and creating a successful for-profit venture driven by positive social impact.

Innovesca seeks to impact global nutrition through food innovation by transforming underutilized nutrient-dense plants into value-added ingredients. To optimally use these robust sources of nutrition, we develop natural processing technologies that unlock the inherent nutrients of whole foods post-harvest to maximize nutrient release and absorption. This research was developed initially at Carnegie Mellon University and funded by the Bill and Melinda Gates Foundation and the National Science Foundation.

What we do:

RESEARCH — We scientifically develop ingredients with optimized nutrition from underutilized plants through innovative processing technologies.

LOCAL OPERATIONS — We work with smallholder farmers in developing countries to source underutilized plants and establish local manufacturing operations to produce our ingredients, creating jobs and generating wealth in these regions.

END MARKETS — We establish partnerships (Food, Health & Wellness sectors) to create end markets for our ingredients, enabling nutritious products powered by Innovesca.

OUR APPROACH:

As opposed to synthetic fortification or genetic modification to artificially enhance nutrient content, we innovate all-natural solutions to enhance product nutrition through creating ingredients with high nutritional and social impact value.

Our approach is two-fold:

1. Underutilized plants

We transform robust and sustainable sources of natural nutrition into high-value food crops.

2. Technology

PROBLEM: Nutrient content does not equal nutrient uptake, as the body cannot digest plant matter.

SOLUTION: Post-harvest processing technologies unlock the nutrients of whole foods, allowing the body to access more nutrition per bite.



Our initial product offering is a value-added ingredient made from amaranth leaves, an underutilized superfood found throughout Sub-Saharan Africa, South Asia & Latin America. We partner with smallholder farming cooperatives in rural Rwanda to source amaranth leaves year-round.



Top Talent Discovers and Connects to Great Careers

<http://www.studentintuition.com/>

<http://www.yourtalentagents.com/>



Imagine Careers

Imagine Careers (IC) is a hybrid software and services talent agency for professionals in technology and business. Our mission is to develop and guide top talent to discover and connect to great careers.

Just as athletes or artists have agents to represent their interests and cultivate their careers, so too can the best existing and soon-to-be professional talent in technology and business. Our company develops talent as early as college through career maturity and brings them to market by providing guided skill-building and discovery tools, analytics-driven career recommendations, personal representation and career assistance as well as project-based and full time career placement services. The breadth of our software and service offerings creates a proprietary process known as Predictive Career Engagement.™

IC is positioned to be disruptive in this space because it is unequivocally talent-facing, whereas the rest of the job aggregation and recruitment landscape is decidedly corporate-facing.

TEAM:

- Mark Heckmann – CEO
- Eric Harvey – President, CTO
- Dr. Deb Kearney (co-founder)
- Whitney Coble (co-founder) Emerging business attorney

COMPANY STATUS:

- Founded in May 2014
- Result of merger between Student Intuition, Inc and YourTalentAgents.com
- Eight major colleges and universities in partnership
- Over 250 companies can hire IC talent through 5 strategic recruiting partnerships

REVENUE:

- \$75K in 2012 (YTA)
- \$150K in 2013 (YTA)
- \$464K in 2014 (YTA+SI, projected)

BUSINESS MODEL:

- SAAS services for passive and active job seekers
- Placement fees for project, part-time and full-time hires
- Direct marketing of educational content and promotions
- Selling Data, Industry Reports

RAISING \$1.MM SERIES A:

- Accelerate sales and marketing
- Accelerate product development
- Hire development and sales team

MORE INFORMATION:

Mark Heckmann:
markheckmann@gmail.com

Problem:

There is a near ubiquitous dislike for job searching amongst job seekers worldwide. Professionals ranging from current college students to employees with many years of experience encounter the same issues in the open job market:

- The search process can be lonely and ineffective.
- The search process can also be completely saturated with recruiters.
- There is a deficit in skill development and continuing education opportunities for passive job seekers.
- Employer and job data is completely disaggregated.

Solution:

Imagine Careers is positioned to be disruptive in this space given the potent combination of two companies that are reinventing how talent is cultivated and brought to market:

- We are the first company to create a career cultivation continuum that can begin in college and last throughout a candidate's lifetime.
- Every job candidate will have a point of contact in our system for career counseling, strategy and placement services.
- Our unique relationship with recruiting firms and our proprietary technology allows us to route our candidates to companies who are looking for them without the candidate actively searching.
- We are leveraging the training and discovery tools of strategic partners to incentivize skill-building and personalized career tracking.
- Our software includes the continual improvement of sophisticated analytics that can make recommendations for discovery, skill-building or career opportunities based on personalized preferences on indicators like workplace culture, size and compensation.
- We provide real-time updates and alerts on information critical to each individual's career path, whether they are active or passive in our system.



The Restaurant “anti-reservation” App— Stop Waiting, Get in Line from Your Phone

<http://nowaitapp.com/>



MORE INFORMATION:

Visit nowait.com, follow @NoWaitApp and like it on Facebook at [facebook.com/nowaitapp](https://www.facebook.com/nowaitapp).

The app is available for Android, as well as iOS.

NoWait

With offices in Pittsburgh and New York City, NoWait launched in 2010 in Pittsburgh and is backed by investors including Drive Capital and Birchmere Ventures. **NoWait grew from 4 to 22+ employees while a StartUptown resident.**

NoWait raised \$10 million in Series B funding recently. The new round was led by Drive Capital, the \$250 million Ohio-based fund focused on Midwestern companies, and co-founded by former Sequoia partners, Mark Kvamme and Chris Olsen.

The NoWait guest app is a complementary extension of the NoWait Host app, which currently is used in casual-dining restaurants across the country, including major national chains such as First Watch, On The Border and Buffalo Wild Wings, as well as popular independent hotspots like Batali & Bastianich Hospitality Group's Eataly, Jose Garces' Village Whiskey, Marc Vetri's Pizzeria Vetri and Hubert Keller's Burger Bar.

To date, NoWait has seated more than 50 million diners and regularly seats more than 5 million diners every month.

Robb Myer is the President and Chief Product Officer of NoWait, the first and only mobile network for casual-dining restaurants, which he founded in 2010. Since launching the company, NoWait has grown from seating 700,000 guests every month to 5 million, and more than 50 million overall. In early 2014, NoWait launched its consumer-facing guest app, which is now available at casual-dining restaurants in all 50 states and in every major metropolitan area across the country.

Outside of the office, Robb is a frequent speaker at Carnegie Mellon University, his alma mater, and an active advisor to emerging start-ups at AlphaLab and Startup Weekend. He also has authored two patent-pending innovations for his product developments at NoWait. A highly sought-after industry expert, he has been interviewed for Entrepreneur Magazine, Bloomberg, Fox News and NPR.

Robb holds an MBA from Carnegie Mellon University's Tepper School of Business and a BS in electrical engineering from the University of South Florida. Additionally, he has earned a PMP certification and LEAN 6 Sigma Green Belt. A 2013 Fast Trackers Award recipient, Robb has been honored as a leader from Pittsburgh's business community who are under age 40.

Luke Panza is the Director of Marketing for NoWait, and co-founded the company in 2010.

Luke brings nearly a decade of experience spanning consumer packaged goods and the hospitality industries, where he focused on front-of-house service and management in both Pittsburgh and Philadelphia. Previously, he worked for five years at Ferrero SpA, a world-renowned Italian manufacturer of chocolates and other confectionary products. As a Brand Manager based in both American and European offices, he focused on new product development where he spearheaded the strategic research and development of various international brands.

In June 2014, Pittsburgh Business Times honored Luke among the region's 40 most outstanding business leaders under the age of 40 for his significant achievements. Additionally, he has been profiled by KDKA-TV (CBS Pittsburgh), G/O Digital and Social Restaurant Podcast.

Luke holds a BA in economics and Italian from the University of Pennsylvania.





Live Data — Changing the Equation

<http://www.webkite.com/>



WebKite

TEAM:

- Eric Silver (CEO, founder; CMO ModCloth, McKinsey, Peace Corps)
- Peter Meulbroek (CTO; CTO Lockerz, Dir. Cloud Computing Yahoo!, led 65)
- Chris Connors (CXO, Lead interaction designer for Apple productivity apps)
- 13-person tech team from Stanford, CMU, UPitt, and MSU with five PhDs

RECENT FUNDING HISTORY:

WebKite has ~200k convertible debt and over \$1M in capital from the founding team.

Funding Sought: \$2M seed

USE OF FUNDS:

Monetizeable use cases, publish our API, & grow the user base to raise a Series A in 2015

EXIT STRATEGY:

IPO by 2019 with multiple opportunities for earlier exit for early investors.



Only a few percent of the world's economy is online. Without local inventory (schedules, inventory, menus) accessible via web-connected devices, this is unlikely to change. Most small businesses already keep the relevant data in spreadsheets yet those who publish do so as text. Simultaneously, the emergence of multiple search and design engines create a need for small businesses to not only publish, but to broadcast their data across their site, Facebook, and into search via open data.

WebKite changes the equation by allowing anyone to publish live data automatically from any data source, to any page, platform, or API.

Our solution:

Starting January, we've created a WordPress plugin that connects to Google Spreadsheets to publish and update menus, directories, and simple catalogs. Launched in April, it's been downloaded over 1,000 times, growing ~10%/week. This plugin allows any WordPress user to create faceted and sortable content, making the dominant approach to publishing available to the masses.

We are close to launching an embeddable widget that allows this content to be posted anywhere, kept up-to-date, and sharable.

Everyone who publishes migrates their data into an open schema. This format allows us to publish directly into search engines, platforms, mobile apps, rich pins, and ads.

Go-to market strategy:

WebKite has a freemium model that enables any user to publish a basic theme to a single platform at no cost. We plan to charge for transactions, data syndication, and API access. In time, we expect that the value of our data asset will eclipse this payment stream as decision-focused sites and researchers license data to power decision-focused search, research price sensitivity, and power rich ads.

SinglePlatform and OpenTable have priced data syndication and scheduling so as to suggest a multiple revenue opportunities in the tens of billions per year.

Barriers to entry & competitive analysis:

Our primary competitors will eventually be Google, Microsoft, and Facebook. We see emerging competition from new data publishers (silk.co), vertical solutions seeking to compile all data and build extensive faceted search (findthebest.com, Factual), vertical-specific solutions (Shopify, WebLink), and traditional publishing (Wix, Weebly, WordPress).

Our niche is cross-platform publishing, focused on the designer and the data owner. This approach will win because connecting to source data is the only way to overcome the stale content and local inventory problems. We anticipate integrating Github to allow users to create & share solutions that utilize our API within our platform, building new use cases and meaningful barriers to entry.



If Robots Can Fly — They Can Do Laundry!

email: mross@fr-ltd.com

Frontier Research

MARKET:

The market for personal service robotics segment of the service robotics market is growing every year. The market was worth **\$21 billion** in 2014 and is expected to double by 2017.

A number of factors are driving this growth not the least of which is the aging of the baby boomer population and the non-trivial costs associated with assisted living facilities.

CONTACT:

Mark Ross at 412-654-4051 or email: mross@fr-ltd.com

Below: Kinova robot arm adjusting radio frequency.

Founded in 2013 by Dr. Scott Thayer and Mark Ross, Frontier Research is devoted to the proposition that we are on the cusp of the robot revolution. Given the advances over the last two decades in robotic technology — advances in sensors, autonomy, manipulability, and situational awareness —

We believe it's time to bring robots home.

Frontier Research (FR) provides innovative robotic solutions for automating critical, complex, and unstructured tasks. With experience in the field of manned and unmanned robotics in both government and commercial markets — the company looks to expand into the consumer market with mobile and stationary robotic systems geared toward automating a variety of domestic tasks.

Experience:

This view is informed by twenty-five years of experience in the field of Robotics during which FR has designed and fielded a variety of autonomous robots — and worked on a 3D mapping system for Chernobyl where a robot could access and provide a map of the area — without endangering human lives.

In an effort to address the problem of our nation's aging water and sewer infrastructure, FR designed and deployed an autonomous robot featuring an advanced sensor suite that has performed over 250 pipe inspections for municipalities over the United States and Canada.

DARPA:

FR worked recently with the Defense Advanced Research Projects Agency (DARPA) to demonstrate the viability of robots working as copilots aboard the nation's most advanced aircraft — programming and deploying a commercially available robotic arm to perform a number of mission critical and emergency tasks by identifying and manipulating various cockpit controls on a simulated flight deck.

Folding Your Laundry:

Frontier Research has a multi-year plan to design, market and sell a machine capable of performing numerous household tasks including washing and folding laundry, cleaning bathrooms, washing dishes (and/or loading a dishwasher), and household dusting.

Later, the company intends to field models capable of more advanced functions such as checking kitchen surfaces for bacteria, straightening rooms by picking up and storing stray items, cataloging and removing expired food products, and even home security using advanced biometrics such as voice and face recognition.

If you are interested in joining us in inventing the future, please call Mark Ross at 412.654.4051 or email at mross@fr-ltd.com.



StartUptown Founder Dale McNutt — *Motivation*



The Global Creative Commons — New generations are growing up with Internet access and digital versions of tools, previously only in the domain of the trades. Today, learning how to *make*, and understanding how things *work*, gives individuals the power to create and participate in the entrepreneurial experience unlike any time in recent history.

Everything that the ease of on-line access affords, and the DIY (do-it-yourself) culture and the new manufacturing paradigm promotes — is the ease of creative understanding with the full empowerment of participation. “I can do this,” or “I can understand this” is a powerful self-affirmation — it’s the maker’s creed — and it builds self-esteem.

Not Just STEM — *This maker revolution is not just about STEM education.* The entrepreneurial experience includes quality arts education and exposure to artistic endeavors, a strengthened personal creative psychology, *and* STEM— all working together to build a broad inclusive and collaborative entrepreneurial culture able to withstand the stress of rapid change and the multi-disciplinary dance of a free agent in a dynamic live-work and learn economy. In my grandson’s West Bath, Maine, kindergarten they call this ongoing entrepreneurial life, “expeditionary learning.”

Dancer and choreographer Twyla Tharp writes, “Collaboration is the buzzword of this millennium. For some of us, it’s a superior way of working; for almost all of us, it’s inevitable.”* Collaboration is then simply the amplified power of WE. The enhanced globally-scaled and hyper-local ability to get things done!

Community Culture — Creating an *entrepreneurial culture* starts in preschool and ends with the realization that each space we inhabit is a living space for “making”— from Picasso’s living room (*where he made most of those great paintings*); to baking in a light commercial kitchen; to art studio or fabric print shop; to research laboratory; to a 3D printer in a maker lab or an automated manufacturing floor — this work, whether propelled through chemistry, physics, biology, creative arts or psychology, is all about making and extending our human boundaries — at its grandest, is the realization we potentially inhabit a galactic-scaled maker-space run by the code of an entrepreneurial spirit.

On the street, an entrepreneurial culture provides skilled jobs and builds awareness of alternate career paths through internships; retains and builds our youthful creative populations; offers under-served community residents access to supporting jobs and maker programming; increases the need for community services and retail — all providing business opportunities potentially operated by community residents.

The Sum — An entrepreneurial culture embraces STEM, creative arts, the maker culture, and a strengthened psychology of self and place. It’s inclusive, compassionate, and sustainable. It results in an ecology of diversity and abundance. It’s adaptive, responsive and supports collaboration. Its core values through time are expressed through love and fidelity to both family and planet. In this new century of deeper emotional resonance, we all move from Head to Heart, to become entrepreneurial spirits with compassionate hearts.

* The Collaborative Habit, Life Lessons for Working Together, 2009, Simon and Schuster — Twyla Tharp.