

[PITCH VIDEO](#) [INVESTOR PANEL](#)

INVEST IN SMARTBIN.IO (TECHSTARS 21')

Fully Autonomous Trash Bin Collecting Robot

LEAD INVESTOR



Marco Mirabella Founder & CEO at Ensuro

Hamoun's ability to convey a story and convince people to follow his vision is something unseen. His passion for solving the massive problems surrounding waste and recycling is contagious. He is a continuous source of learning for me, always bringing to the table innovative ideas and processes. His team is talented and manage to maintain a very high level of productivity, despite having been located in different parts of the world until recently. The Smartbin.io product is simple yet very powerful. The waste and recycling sector has not been innovated for a long time and I am confident that this is the team that can definitely have a big impact in this space. Their smart bin business alone will prove to be a multi-million dollar success, however, the team strives for more innovation and pursues the greater vision at an incredible pace. I am thrilled to be investing in this round and helping the team fund the development of their next product in their already amazing line-up and I am honored to be part of Smartbin.io's journey and invest my time, money, and effort in it.

Invested \$25,000 this round & \$5,000 previously



Invested \$25,000 this round & \$5,000 previously



Hardware

Software

Technology

Sustainability

Artificial Intelligence

Highlights

1

★ Techstars Portfolio Company ★

2

🏆 Award Winning Team - \$1.6M raised on Kickstarter for previous robotics startup
🏆

3

🇺🇸 Patent Pending in US + Canada 🇨🇦

4

♻️ Smart bin technology piloted by Google HQ ♻️

5

🤖 CTO has shipped over 12,000 robots at previous startup Scribit 🤖

6

👨‍💻 Experienced design team who has worked on multi-million dollar projects 👨‍💻

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Our Team



Andrea Bulgarelli CTO

Previous CTO of Scribit (4,352 backers pledged \$1,641,316 on Kickstarter) passionate about design and latest tech edges. I have a strong experience in launching robotics products to the market, from the concept to the stores.

Robotics will fix our waste and recycling crisis once and for all. Our robots collect weight data on waste and recycling generated every day. Our back of house robots will sort through the recycling and remove any contaminants found in these streams. Achieving 100% waste diversion and helping fix the biggest challenge in managing our waste.



Hamoun Karami CEO

Waste/recycling expert who has spoken to hundreds of stakeholders in the supply chain. Has taken the company from concept to where it is today. Is dedicated to solving our global waste crisis using technology. UN Impact Conference 2020 Speaker



Alexander Lehnert CDO

I am a digital product and motion designer who has worked on multi-million dollar design projects with the leading brands in the world. I am responsible for leading on all design aspects of our company from brand to product design.

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smartbin.io

Indoor Robotic Garbage System

Pitch

The Smartbin.io Team



Andrea Bulgarelli - CTO

After earning his master's degree in Mechatronic Engineering in 2012, Andrea founded his first start-up as a Research Fellow. He developed an open-source robotic hand catered to deaf-blind people under the open-source Parloma Project.

In 2015 he co-founded Remidi Inc. in Austin (TX), where he led the research and development of a revolutionary wearable instrument, bringing it to the mass market.

Finally, together with MIT professor Carlo Ratti he founded Scribit, the world's first write and erase robot. With Scribit he won the RedDot Design Award 2019, the TIME's 100 best inventions of 2019 and many other awards. In less than a year more than 12,000 units have been sold and shipped.

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The Smartbin.io Team



Hamoun Karami - CEO

Passion for smart buildings started when I founded a club at school that



transformed the school into a gold certified smart school within the first 12 months. Since then, I have spoken in front of global audiences alongside the UN about our global waste/recycling crisis.

I built a successful e-commerce company in 2013 which had customers like AirBnB, Nike & NHL.

Moved to Taiwan in 2015 where I consulted the city government on Smart City projects and started my first technology startup Mapgea, which utilized citizens smartphones to help report on potholes, dirty washrooms, full trash bins and other public amenities.

To date our company has been featured in the NYTimes, BBC's future planet and more. We have won many international awards including the Global GoSmartCities Award for 2020.

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The Smartbin.io Team



Alexander Lehnert - CDO

Alex has worked on multi-million dollar design projects with some of the biggest brands in the world. This includes Mercedes, Lamborghini, PwC, Lufthansa, Red Bull, BOSCH and many more.

In his spare time, Alex teaches visual effects and motion design lessons for FXPHD and Hello Luxx, based out of Chicago and Sydney.

Alex has strong attention to detail and provides his design expertise across all Smartbin.io products and marketing.

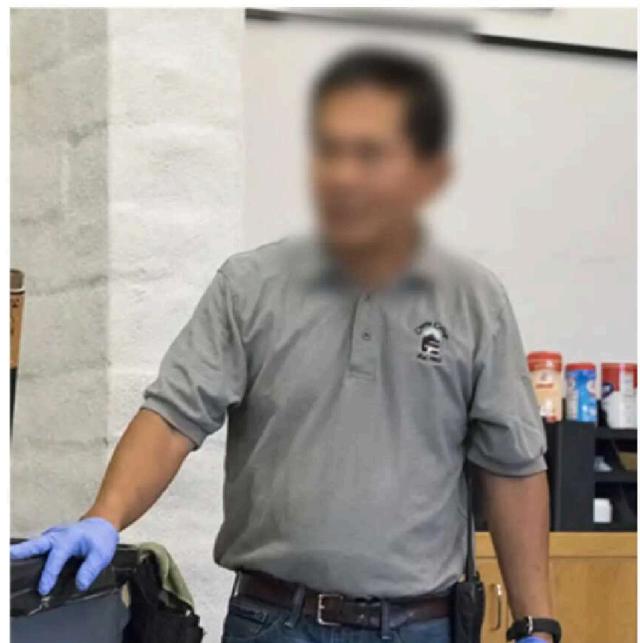
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Problems

Managing waste & recycling in a building is **expensive and inefficient**.

The industry is experiencing the **largest labour shortage in history**.

Waste/Recycling data is delayed and addressing **waste contamination** is the top priority to meet ESG goals.





Solution

We are building an automated robotic waste collection platform via;



Bin Collecting Robot

That can collect full waste bins.



Smart Bins

That send out alerts when they become full.



Analytics

That displays data on waste generated every single day.

Opportunity

There is 15 billion square feet of commercial space in North America.

Our Pilot Clients

We are currently piloting our solution at Google's HQ in Silicon Valley. The pilot has already been expanded.

We are increasing the performance of humans for now, but the plan is to insert robots as soon as they are ready.

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Advisory Board



Jason Gates  **COMPOLOGY**
Founder & CEO of Compology
AI/ML, Computer Vision & Hardware



Louis Collard  **Google**
Google Lead - Chromebook OS
Hardware & Firmware

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Investors

160K
Raised to date



Jeff Kints (Investor)
Suntastic (Acquired)





Appendix

Market Size

\$20B

US Waste Management Janitorial Services Market Size

Appendix

Competitive Advantages

PATENT PENDING

Indoor Autonomous Robotic Waste & Recycling Collection System

First to Market

The first indoor only smart waste and recycling bin that utilizes low-tech laser technology.

Advisory Board

Jason Gates—CEO & Co-Founder of Compology (Machine Learning & Computer Vision)
Louis Collard—Ex-Google Firmware Lead

Design

Design thinking at the forefront of everything we do and build, and a big secret weapon.

Backed by Techstars

Red carpet introductions to large corporations and their key decision makers.

Appendix

Unit Economics

The average target building has 500 waste and recycling bins.

Today

500 Regular Bins

\$230,000

15 Staff

\$438,750/ Year

Smartbin.io System

500 Smartbin.io Bins

\$230,000

8 Robots

\$196,800/Year

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Appendix

Business Models

Smart Bin

\$449/\$849/\$1449

SaaS \$5 Month/Bin

Installation & Integration

Support & Maintenance

ESG Waste Reporting & Audit Tool

Consulting Services

Robotics Leasing

\$2,085 Per Month/Robot

Installation & Integration

Support & Maintenance

ESG Waste Reporting & Audit Tool

Waste/Recycling Weight Data

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Appendix

Why?

Bin Collecting Robot

Weight data on waste & recycling

Without the need for human

	generation every day.	intervention.
Smart Bins	Fill-Level data on waste & recycling generation every day.	Made from 97% recycled HDPE and designed around the robot.
Analytics	Waste and Recycling analytics to help sustainability teams report monthly CSR & ESG.	Open API that is interoperable with any frontend software system.

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Appendix

Concept #1 - Single Bin Collecting Robot



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Appendix

Concept #2 - Bag Grabbing Robot



Appendix

Concept #2 - Mini Recycling Sorting Machine



Appendix

Market Validation

Avidbots



Commercial Floor Scrubbing Robot

VIA BOT



Autonomous Robot Sweeper

UVO ROBOTICS



UV Sanitizing Robot



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Downloads

RMDOCS- 6592451-v1-US PRV Figures 1 .PDF