

[www.pitchdrive.xyz](http://www.pitchdrive.xyz)



# ASIA

IN PARTNERSHIP WITH  
Google for Startups

BROUGHT TO YOU BY



IN PARTNERSHIP WITH



## ABOUT PITCHDRIVE

Africa is home to the world's fastest growing cities, and more than half of the world's population growth will take place on the continent over the coming decades. By 2050, cities like Lagos and Kinshasa will be global megacities, each holding well over 30 million inhabitants.

Africa is also at the start of a technological renaissance. It was recently reported by WeAreSocial that 7 out of 10 of the world's fastest growing internet populations are in Africa – the beginning of a trend that will likely reshape entire economies as new companies leapfrog established technology, ideas, and infrastructure.

While the core of Africa's reputation for tech innovation is unique software solutions/applications, the continent is also home to many startups creating hardware solutions for African and global markets. Furthermore, there has been a sturdy rise in the deep-tech ecosphere in many sub-saharan African countries which were seen as back-benchers in technological innovation. Last year, Google set up its AI lab in Ghana and Facebook kicked off a Deep Tech focused accelerator in Nigeria.

PitchDrive II by CcHUB, in partnership with Google for Startups, will engage 10 of Africa's top hardware and deeptech based startups on a tour of exciting tech cities in Asia.

The focus of PitchDrive II is to facilitate Africa-Asia collaborations to strengthen deep technology companies in Africa by creating a platform for startups to discover and engage partners (suppliers, manufacturers, etc.), explore funding opportunities and exchange learnings.



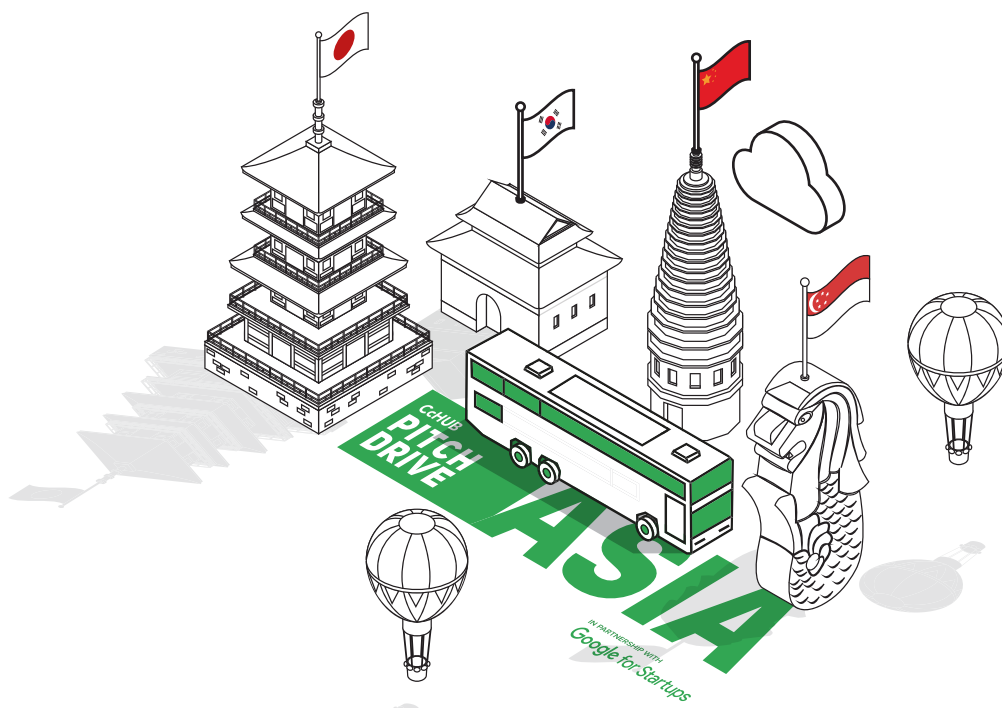
### 5 Cities

Singapore, Seoul, Tokyo  
Hong Kong, Shenzhen



### 10

Deep Tech & Hardware  
Startups



## THE CITIES

### **Kigali**

#### **RWANDA**



We start PitchDrive II with a 2-day bootcamp in one of Africa's most exciting tech-hubs - the city of Kigali. From the humble beginnings of an agrarian-based economy, Rwanda has become a proof of concept destination for innovative companies looking to test, launch and scale including VW Mobility, Zipline, and Babyl Health. Through Government initiatives in long-term planning, investing in IT infrastructure and forward-looking skills, Rwanda's capital has quickly grown into a leader in the knowledge-based sharing economy and is thriving like never before. There's no better place to kick-off PitchDrive II than in this exciting smart city fondly referred to as the "Singapore of Africa".

### **Singapore**

#### **REPUBLIC OF SINGAPORE**



Our first stop in Asia is the Republic of Singapore - a natural financial and communications hub for South-east Asia boasting an extremely high number of programmers and venture capitalists. When it comes to attracting talent, Singapore ranks second in the world and first in Asia. The city-state's robust collaborative networks and talent pools stem from its world-class universities, leading multinational businesses and a rapidly growing ecosystem of startups, business incubators and venture capitalists. With strong government support in R&D spending and a comprehensive IP regulatory framework, Singapore has become an ideal destination for top tech firms. The capital hosts about 80 of the top 100 tech firms in the world and is often labelled a 'miniature Silicon Valley'.

### **Seoul**

#### **SOUTH KOREA**



Seoul, 'the city of the future', is the next stop on our journey. One of the most connected and technologically innovative cities, it hosts Korea's tech giants: Samsung, LG and many others. The Internet of Things (IoT) is changing everything in the city - from utilities to subways to buildings and more making Seoul an attractive test-bed for both IoT and hardware innovation. The startup and venture community here enjoys an organised and mature ecosystem powered by prolific accelerators and active investors. From fintech, real estate tech, healthcare, to travel industries - it's an exciting time for startups and ventures alike in this city's innovation community.

## Shenzhen

CHINA



Next stop is Asia's 'Home of Hardware' - Shenzhen, China. This mega-city of 13 million people is home to tens of thousands of factories. From a former fishing village to a manufacturing hub, Shenzhen is at the heart of China's transformation into a hi-tech innovator. Ambitious tech firms and startups flock to this city to dominate key hi-tech industries such as robotics, electric vehicles and artificial intelligence.

This is the home of entrepreneurial research and development. A product that may take 12 to 18 months to bring to market somewhere else in the World might take only four to six weeks in Shenzhen. Why? Because all factors align to support innovation. Even local government in Shenzhen gives grants for filing patents and for starting maker spaces. This is the ultimate manufacturing hub that connects innovation, manufacturing, and knowledge all over the world.

## Hong Kong

CHINA

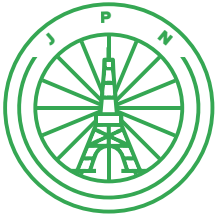


Our third stop is the tech hub of Hong Kong, home to an exciting startup scene featuring over 2,000 startups. A hot-bed for deep-tech talent, Hong Kong-based startups are doing it all - from software as a service, Internet of things, data analytics, biotech, artificial intelligence, robotics, virtual reality and augmented reality, as well as new material. The city's proximity to the manufacturing and telecoms powerhouse that is Shenzhen has no doubt helped make it a strategic location for innovation in Asia.

The city has welcomed the recent expansion by big tech firms such as Facebook and Alibaba, and is enjoying accelerating investment in its fintech sector. With rising corporate engagement in incubation and accelerators programmes, new initiatives to promote start-ups springing from universities, Cyberport and Hong Kong Science Park, and a string of notable funding rounds for start-ups, it is anticipated that Hong Kong's technology sector may soon reach a tipping point and will be propelled into much faster growth.

## Tokyo

### JAPAN



We wrap our tour in Hi-tech Tokyo. In 2018, this city topped global rankings for the world's most innovative cities. An early adopter of new technologies, Tokyo has been hailed for its embrace of smart technology trends including in robotics and 3D manufacturing. In 2016, the city set about an ambitious plan titled 'Society 5.0', as part of the country's transformation to drive development and solve social issues.

It invested in the application of robotics, Internet of Things, Big data and Artificial Intelligence to drive various economic sectors. Tokyo continues to host the best of Japan's hi-tech companies, its strong research and development academics, educated human resources and real data collected at the forefront of industries.



**FINAL  
SHORTLIST**



<http://casky.io/uk>





Casky builds personal road safety IoT devices that makes commuting safer for two-wheeled vehicle (bicycles, motorbikes etc) owners


### PROBLEM STATEMENT

Morocco reported 94,431 road accidents in 2018, a 6.5% increase from the previous year.

### TRACTION

 **\$18,000**  
in cash

 **\$93,000**  
in pre-orders in 8 months

 **5000+**  
devices sold

### SOLUTION

The IoT device is attached onto the back of any helmet, and acts as a brake light, turn signal or hazard signal which alerts other motorists on about the direction of travel. It is also equipped with an emergency response beacon that alerts friends, family and emergency responders of any accidents or safety incidents.

Through their mobile app, Casky also uploads information about traffic congestion, as well as analyzes and scores the road behavior of drivers and continuously provides the best, "safer-driving" recommendations.

### FUNDING EXPECTATIONS



# €2 Million

by the end of 2019

### PARTNERSHIP EXPECTATIONS

The team is looking to partner with cities, manufacturers, insurers, police and Last Mile Delivery/logistics partners

### FOUNDER



**Abid Khirani**

Founder



<http://acgroup.rw/>



AC Group is a technology company providing tailor-made smart transport solutions for the African market

## PROBLEM STATEMENT

Crude Public transport systems in Africa

- Reliance on cash payments
- Lack of availability of transit schedules for consumers

## TRACTION



**170 million+**

trips using the Tap & Go card



**1.5 million**

Users



Expansion into Cameroon, where they complete

**60,000+**

journeys per week.

## SOLUTION

AC group provides smart transport solutions to commuters to ease the burden of public transport. Their flagship product, Tap & Go is a payment card that is used across all public buses in Kigali. Users simply need to buy the cards, top-up and scan in the buses to use.

## FUNDING EXPECTATIONS



**\$13 Million**

## PARTNERSHIP EXPECTATIONS

Looking to gain strategic partners that would help the company's growth and deliver better products to our customers.

## FOUNDER



**Ngarambe Phillip**

Founder





<http://www.gricd.com>



Grid provides affordable cold chain technology for the storage of agriculture and healthcare products in locations without power and infrastructure

### PROBLEM STATEMENT


1.5 Million preventable deaths occur every year due to the lack of vaccine immunization, likewise 19.4million infants do not receive vaccines in part due to the lack of an effective last mile cold chain solution.

Presently, individuals and organizations in Nigeria and Africa at large use passive ineffective cooling methods such as coolers and ice packs to transport and store these temperature-sensitive items.

### TRACTION

 **4**  
corporate partners

 **\$60,000**  
funds raised

 **\$150,000**  
projected revenue for 2019

### SOLUTION

The Grid Frj is a smart active cooling device used in the transportation of temperature sensitive medication while providing real time data on location, storage temperature, security etc. For the healthcare space, it can be used for medical sample collection, vaccines, blood and organ transportation.

### FUNDING EXPECTATIONS

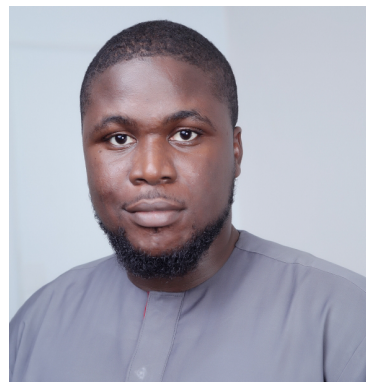


**\$300,000**

### PARTNERSHIP EXPECTATIONS

partnerships with manufacturers that will help in the production of the cooling devices.

### FOUNDER



**Oghenetega Iortim**

Founder



<http://www.accessafya.com>



Access Afya is a primary healthcare social enterprise using technology to deliver affordable and effective health access in Kenya

## PROBLEM STATEMENT


About 60% of urban Kenyans live in slums, where access to healthcare is inconvenient, unreliable and unaffordable.

Residents in the slums choose between crowded, under-resourced facilities or informal chemists, who sell pills but not healthcare. Medication supplied by unregulated, underqualified chemists can be inappropriate for the patient, counterfeit or expired.

Self-medicating or going without treatment only increases the disease burden, and the cost to the patient and the community.

## TRACTION

 **110,000+**  
paid customer visits

 **\$130,000**  
in revenue

## FUNDING EXPECTATIONS



**\$2 million**

in Series A by January 2020

## SOLUTION

Access Afya provides affordable, effective and convenient healthcare to Kenyans living in informal settlements. Patients that visit Access Afya enabled clinics receive care from a Kenyan Clinical Officer, who is able to provide evidence-based medicine on par with a family physician through digital decision support and telemedicine. All patient information is managed digitally ensuring that at any of their clinics, the full health information of each customer is available.

## PARTNERSHIP EXPECTATIONS

The team is looking to engage with larger health tech firms who could become potential acquirers in the future.

To engage with groups that make quality healthcare software tools - with a focus on Seoul and Singapore. Interested in meeting with potential investors, as well as Asian startups doing similar things.

## FOUNDER



**Melissa Menke**

Founder



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



CHIL AI leverages the power of artificial intelligence to improve the access to reproductive health cancer diagnostic services for marginalised people in Uganda.

### PROBLEM STATEMENT


Two thirds of breast cancer deaths, as well as 9 out of 10 deaths from cervical cancer occur in low and middle income countries.


In Uganda alone, cervical cancer and breast cancer contribute to 70% of all cancer deaths affecting women. Across other African countries like Zambia and Kenya, the statistics are similar. The high mortality rates can be attributed to long distances between rural areas and cancer screening centers, as well as the costs associated with these services.

### TRACTION

 **140,070**  
users of mobile app

 **460+**  
test kits sold

 **400+**  
partner laboratories on the African continent

 **\$120,010**  
in revenue last year

### FUNDING EXPECTATIONS

  
**\$150,000**  
within the next year

### SOLUTION

CHIL leverages AI and Machine learning to extend essential healthcare services to the poor, marginalised and those in hard to reach areas in Uganda. Their main focus is in developing breast and cervical cancer testing kits. The test kit for cervical cancer tests for HPV 16 and 18, which are precursors for cervical cancer in women. After testing, the results are then sent through bluetooth to their E-oncology mobile application that uses AI to interpret results.

### PARTNERSHIP EXPECTATIONS

Looking to secure joint venture partnerships with established startups and companies that utilize Artificial Intelligence in their solutions.

### FOUNDER



**Dr. Shamim Nabuuma Kaliisa**

Founder





Taeillo is a home-fashion brand that specializes in the design, manufacturing and sales of modern African furniture

## PROBLEM STATEMENT

The process of buying furniture has not changed much in Africa over the decades. Most Africans buy their furniture in one of 2 ways - source from local carpenters or buy ready made pieces in physical stores. Africans are skeptical to buy furniture online because of the lack of trust that characterizes e-commerce in Africa. Taeillo wants to make the process of buying furniture online easy and accessible to Africans, especially millennials by selling premium quality African furniture pieces online, as well as adopting technology that allows people to interact with the furniture pieces in a life-like manner before purchasing.

## TRACTION

 **\$122,000**  
in revenue

 **\$165,000**  
raised in venture funding

## FUNDING EXPECTATIONS



**\$2,000,000**

within the next 24 months

## SOLUTION

Taeillo is set to change the furniture space by leveraging Augmented Reality (AR). The startup provides its customers with a mixed-reality shopping experience that allows them to interact with the furniture pieces in a life-like manner before buying. From the comfort of their homes, customers can virtually place the furniture pieces in any open spaces in their home for a clearer vision of the product before purchasing.

## PARTNERSHIP EXPECTATIONS

The team is looking to gain access to world class manufacturing processes that will enable them to refine their technology and manufacturing processes. They are also looking for partners that will help them with promoting their brand in the Asian market.

## FOUNDER



**Jumoke Dada**

Founder



Enova robotics specializes in mobile robot development and robotics R&D projects.

## PROBLEM STATEMENT

The physical security industry has not changed much over the years. Companies, individuals and governments still rely on the presence of physical security personnel to safeguard their lives and properties. In the U.S alone, it is estimated that physical security guards spend at least 1 million man hours each night patrolling and securing lives and property.

## TRACTION



**\$1.8 million**  
raised in venture funding

## SOLUTION

The team has developed P-Guard, a mobile robot capable of performing autonomous patrol/surveillance in the place of security guards. The P-Guard is equipped with sensors and cameras to capture the surrounding sounds and forwards all images seen from/to the operator. It is capable of working for 8-10 hours.

## FUNDING EXPECTATIONS



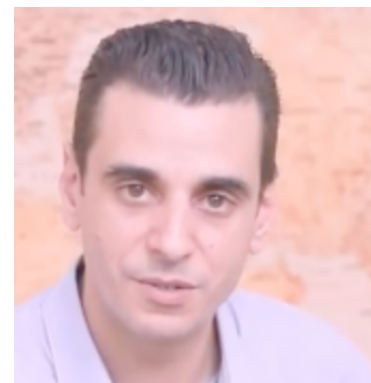
**\$20 million**

by the end of 2020

## PARTNERSHIP EXPECTATIONS

- Discover more about the Asian startup ecosystem and take key learnings from the Asian technology market.
- Find technical partners who will provide innovative solutions with high localization accuracy and a robust intrusion detection for their own robots.
- Partner with a hardware development company to help improve the mechanical design of the security robot and design the next generation of the P-Guard.

## FOUNDER



**Radhouane Ben Farhat**

Founder



<http://www.flare.co.ke/>



Flare aggregates privately owned ambulance companies into an interface for patients and hospitals

## PROBLEM STATEMENT


Two-thirds of the world lacks access to a 911-like emergency response system. This amounts to 5 billion people spread across Africa, large parts of Asia, South America, and Eastern Europe. Kenya, with a population of 50+ million experiences 3.8 million emergencies annually.

With mobile penetration on the continent on the rise, it is important to meet the emergency needs of Africa's most vulnerable population with low-cost, ready-to-scale solutions for emergency response situations.

## TRACTION

 **\$200,000+**  
revenue

 **1000+**  
rescues

 **500+**  
network of ambulance providers

## FUNDING EXPECTATIONS



**\$1.5million - \$3million**

depending on the chosen target market

## SOLUTION

Flare has built an uber-like consumer-facing app called Rescue, that allows patients to see available emergency/ambulance options and request help quickly. They leverage existing ambulance providers and today's technologies - IoT, machine learning and data science to provide this solution to connect consumers to these providers 24/7.

## PARTNERSHIP EXPECTATIONS

Looking to meet investors and manufacturers that will help them scale by reducing production costs. Find manufacturing partners that production can be outsourced to.

## FOUNDER



**Caitlin Dolkart and Maria Rabinovich**

Founder



<http://www.lifi-led.ci>



LIFI-LED uses Light fidelity (LIFI) technology to transmit internet and educational content through LED lighting networks.

## PROBLEM STATEMENT

The WEF estimates that closing the energy gap in Africa will increase economic growth on the continent by 2040. Currently, over 600 million people in Africa lack access to clean, affordable, reliable energy. LIFI-LED is on a mission to provide African countries with a cost effective way to generate electricity and internet for its people.

## TRACTION



Operations in 4 African countries  
(Côte d'Ivoire, Madagascar, Burkina Faso and Liberia)



**7500+**  
users



**\$252,000**  
revenue

## SOLUTION

Since 2014, LIFI-LED has provided electricity and internet to populations with difficult access to those facilities. LIFI-LED is a wireless optical networking technology that uses light-emitting diodes (LEDs) to transmit data/internet. LiFi data is transmitted by the LED bulbs and received by photoreceptors. LIFI is designed to use led light bulbs similar to those currently in use in many energy-conscious homes and offices.

## FUNDING EXPECTATIONS



**\$4.5 million**

by the end of 2019

## PARTNERSHIP EXPECTATIONS

They are looking to secure partnerships with strategic manufacturing partners and investors.

## FOUNDER



**Balma Ange Frederik**

Founder




RelianceHMO uses mobile phones, data science and telemedicine to make health insurance cheaper and more accessible.


### PROBLEM STATEMENT

The health insurance market is currently ill-equipped to serve the majority of Nigerians. Only about 4% of Nigerians have some form of health insurance (public or private) and studies show that about 30% of families in Nigeria are at risk of falling into extreme poverty from a single adverse health event. A market woman in Lagos today would find systemic barriers to enrolling her family for the public health insurance program. If she eventually succeeded, she may be dissatisfied to find that coverage is only for public clinics with long queues and a reputation for poor patient-care. If she ventured into the private sector, she may struggle to pay the required large, annual, lump-sum payment upfront.

### TRACTION

 **\$430,000+**  
Revenue in the last 12 months

 **6,800+**  
Customers

 **\$2.3M**  
raised

### FUNDING EXPECTATIONS



**\$5 million**

### SOLUTION

A typical customer enrolls for Reliance HMO plans via a mobile phone, either online or through agents or partners. Immediately after enrollment, users get a digital or SMS based ID they can use to access care in nearby hospitals, eliminating the typical 2 weeks wait with competing insurers. The company's proprietary algorithms using data science and machine learning allows the team to operate cost-effectively by automating administrative tasks like claims processing and premiums price adjustments.

### PARTNERSHIP EXPECTATIONS

Health insurers who can share their expertise in risk management and underwriting. Machine Learning and Data Analytics experts to help improve the team's data science capabilities.

### FOUNDER



**Dr Femi Kuti**

Founder



## **ABOUT CCHUB**

CcHUB is a social innovation centre dedicated to accelerating the application of social capital and technology for economic prosperity. The technology hub is the first in Nigeria to serve as an Open Living Lab in which user-driven innovation is fully integrated in the co-creative process of new services, products and societal infrastructures.

CcHUB's methodology is hinged on engaging a community of progressive stakeholders (end-users, subject matter experts, government agencies, businesses, academics, civil societies etc.) who bring their creativity and knowledge to play in co-creating solutions to social challenges faced by the average Nigerian through our open living labs. The resulting innovations are then supported to become sustainable market solutions by providing proactive business support, advice, mentorship and funding through our pre-incubation & research unit. For more information, visit [www.cchubnigeria.com](http://www.cchubnigeria.com)

## **ABOUT GOOGLE FOR STARTUPS**

Google for Startups helps startups thrive across every corner of the world by bringing the best of Google's products, connections, and best practices to enable startups to build something better. To learn more about Google for startups, visit [startup.google.com](http://startup.google.com)

## PARTICIPATING GFS PARTNERS



## PARTNERS



Republic of Rwanda  
Ministry of ICT & Innovation



RwandAir



NOTES

NOTES

## **CONTACT**

'Bosun Tijani

E: [bosun@cchubnigeria.com](mailto:bosun@cchubnigeria.com)

Damilola Teidi-Ayoola

E: [damilola@cchubnigeria.com](mailto:damilola@cchubnigeria.com)

Co-Creation Hub Nigeria,  
6th Floor,  
294 Herbert Macaulay Way,  
Sabo, Yaba, Lagos.