Braving the Epidemic
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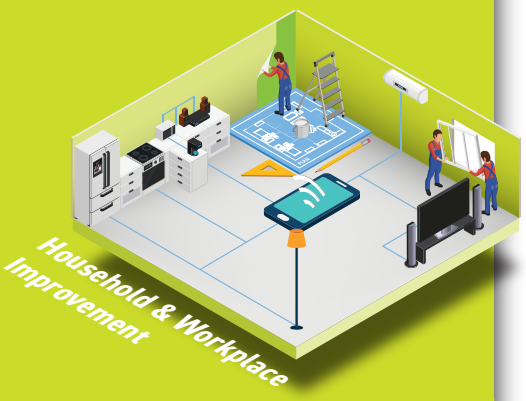


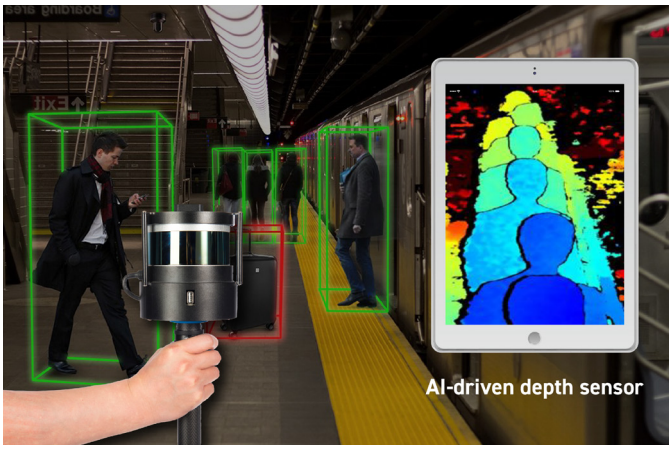
Integrated vision technology: The whole is greater than the sum of its parts

Specialising in 5G smart construction site solutions, Christopher's tech firm implemented security controls for various major construction sites such as monitoring whether workers were wearing helmets in accordance with the safety guidelines.

COVID-19, however, has made face masks compulsory in public places. And that in turn proved to be an obstacle for the facial recognition algorithms that Christopher had developed earlier, making it difficult to fulfill its role as the last line of defence properly.

But then Christopher remembered he had met Lila from VisionMatrix at a hackathon a couple years ago. VisionMatrix had developed a facial recognition algorithm which could accurately target mask wearers, using video facial analytical software. The duo were able to merge the two algorithms, solving Christopher's 21st century problem.

While the coronavirus crisis has brought forth unprecedented problems, it has also created tremendous opportunities. The epidemic has threatened many industries with a looming economic downturn, and generated new demands, such as solutions catered to social distancing, cloud services, face masks, and related products and technology. Thanks to modern technology, we have helped our partners in various industries to keep their business up and running. With the support of artificial intelligence and cloud solutions, retail industry merchants, who have suffered badly over the past months, can continue to run their business at lower costs," said Lila Li, Chairman of Cyberport Community Member VisionMatrix.



The depth sensor crowd meter module developed by VisionMatrix combines a depth camera with a 3D AI engine. This AI-driven depth sensor can acquire multi-point distance information and so acquire a precise picture with full 3D depth perception. It enables both crowd calculations and motion tracking, but without actually collecting personal identity or capturing any details and features to preserve data privacy and security.

The depth sensor can be installed on a patrol car, or at a specific venue, to monitor the number of people. On the other hand, it can also be integrated into other tech solutions, such as Christopher's, directly on the cloud to solve the pain points caused by the difficult "new normal" in our community.

Lila said that the pandemic had created a huge market for his facial recognition algorithm targeting mask wearers. There has also been an increasing demand especially from clients of medical beauty and public security, bringing a significant sales growth of 200 percent.

Quick facts

VisionMatrix

- The sales of VisionMatrix's mask wearer facial recognition algorithm has doubled.
- A similar depth sensing module produced by other countries costs around US$3,000 but VisionMatrix is planning to apply their depth sensing optimisation IP to a locally made product, for US$500 apiece.

Company Profile

Cyberport startup VisionMatrix was established in 2018 with a focus on developing computer vision big data, and artificial intelligence technology for retail, school campuses, and daily life scenarios. The tech firm offers lightweight intelligence analysis equipment and technology solutions for shopping malls, schools and private homes. VisionMatrix is currently in the stage of Pre-A round of funding. Their clients include Internet companies listed on the Nasdaq, Greater China government departments, and listed retail companies.

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Learn more about VisionMatrix

Your Springboard to Success

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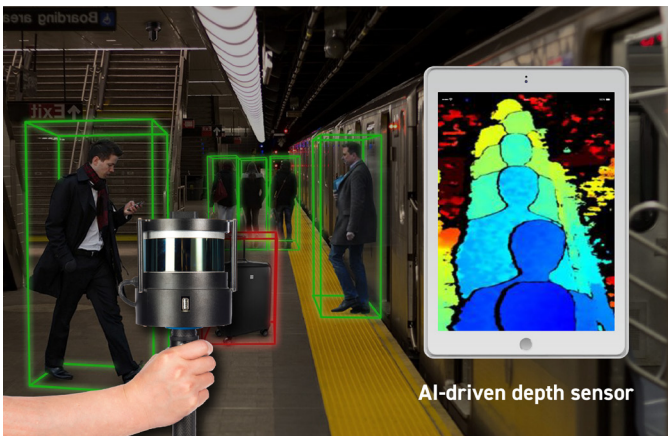
Christopher的科技公司開發5G智慧工地方案，為好幾個大型建築地盤以科技加強安全管控工作，包括監察工友們有否按照指引佩戴安全帽。新冠病毒疫情下工友們都戴上口罩，然而這就為Christopher的技術構成障礙，因為工友戴上口罩後，他原本的推算法沒辦法針對戴着口罩的人臉進行識別和比對，從而失去了安全把關的意義。Christopher於是聯絡多年前參加黑客馬拉松時認識的Lila，其公司VisionMatrix開發了一套戴口罩人臉識別算法及視頻人臉分析服務器，他二人將兩套算法結合，成功解決了原有數碼方案的盲點。

數碼港畢業初創VisionMatrix主席李瀚琳(Lila)表示：「新冠病毒疫情有危也有機，對衆多行業帶來致命打擊的同時，也衍生出新的需求，例如社交距離、雲端服務、口罩相關的產品和技術等。我們用先進的技術幫助行業合作夥伴在疫情期間維持正常業務，並略盡綿力，進一步使用人工智能及雲端方案，幫助廣受打擊的零售行業商家善用資源，降低運營成本。」

VisionMatrix開發的人數統計儀器，以鏡頭感應環境深度，配合立體人工智能科技，計算出環境內不同地點的深淺距離以得出立體環境資訊，從而準確數算出指定地點所聚集的人數。它可以數算人數及移動中的物件，但不會辨識身份或記錄其外貌，以保障個人私隱。



VisionMatrix指儀器可以安裝在巡邏車或特定場所中以統計人數，亦可與Christopher類似的科技公司合作，直接在雲端調用VisionMatrix的算法接口，填補原本科技方案因社區新常態而出現的漏洞。

Lila指，疫情為其戴口罩算法帶來龐大市場，尤其醫美和安防的客戶，帶動業務提升了至少200%。

速覽

VisionMatrix

- 疫情帶動VisionMatrix的口罩算法銷售業務大增兩倍。
- 類似儀器在外地定價可能高達3000美元，但VisionMatrix正計劃優化其技術應用於本港的產品，並定價約500美元。

公司簡介

數碼港畢業初創VisionMatrix於2018年成立，開發計算機視覺大數據及人工智能技術，應用於零售、校園、及生活應用場景，為商場、學校及家居提供輕量化的智慧分析設備及技術服務方案。VisonMatrix目前處於Pre-A輪融資階段，客戶涵蓋納指上市的互聯網公司、大中華區政府部門及上市零售公司等。

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