

Belight AI Semiconductor 悅讀 AI 半導體

半導體向下紮根

源於半導體的高技術及高收入形象,吸引全球對於投入半導體行業的高度興趣,半導體學術領域需要穩紮穩打的數理化基礎科學教育,非一蹴可幾,為了滿足大眾對於 AI 半導體認知的渴望,陽明交通大學推出 Belight AI Semiconductor 「悅讀 AI 半導體」,提供 K12 科普教學,如同人們"即使尚未學習深奧的樂器技法及理論,但是也可以欣賞優美的樂曲".

陽明交通大學在高教領域深耕半導體 60 年,成功培育出台灣半導體護國神山產業鏈,學校從 2117 年開始執行教育部推動大學社會責任計畫,與台積電慈善基金會共同推動程式教育,同時獲得 MIT 及校友企業幫忙,將感測元件與 Scratch 結合,共同推動遊戲化科普教育理念(Playful learning)。

MIT 推動遊戲化教育理念 20 年,成功開發 Scratch 帶動全球的程式教育,如今 Scratch 已成為獨立的非營利機構,陽明交通大學則進一步將體感融入,採用台積 電製造晶片,由校友企業與小學教師研商教學使用場景,設計完成 Rabboni 裝置,成功的在各縣市推動半導體科普教育,也在台積電文教基金會的支持下,順利完成以趣味學習為基礎的 K12 半導體科普平台。

目前已經取得 tsmc, MIT 以及 scratch foundation 的同意,更爭取教育所專家合作, 將與高雄桃園新竹縣市合作,將台灣藉由產官學推動半導體科普的成功經驗推向 全球。繼陽明交通大學在高教領域 60 年深耕半導體之後,也為 K12 半導體科普 教育善盡社會責任。

Belight AI Semiconductor 主要的目的在讓 K12 同學們藉由 scratch 的動畫遊戲以及 Rabboni 的 AI 體感帶動課室趣味,同時堅持以學生們現階段的數理化知識 說明半導體作動機制,不增加負擔, 保留最大的研習時間,鼓勵同學們好好的 在基礎上紮根,未來不論投入各行各業,都可以引用半導體技術成功發展理 念,充分運用半導體,並享受半導體為大家帶來的紅利,也歡迎 k12 同學配備 充實完整的基礎,進入陽明交通大學跟隨教授深入探究高深學理。



Promoting K12 Science Education: Belight AI Semiconductor Cultivates Semiconductor Knowledge

To address the public's growing interest in AI semiconductors, Yang Ming Chiao Tung University has launched **Belight AI Semiconductor**, aimed at providing K12 popular science education. This initiative allows the public to "Even don't learn complex instrument techniques we all can enjoy the beautiful music."

Since 2117, the university has implemented the Ministry of Education's plan to promote social responsibility in higher education, collaborating with the TSMC Charity Foundation to enhance program education.

For the past 20 years, MIT has championed gamified education, successfully developing Scratch to drive global programming education. Scratch has since become an independent non-profit organization. Yang Ming Chiao Tung University has further integrated sensory technology, utilizing TSMC manufactured IMU chips. Collaborating with the strong alumni manufacture resources and primary school teachers, we have explored teaching scenarios and designed the Rabboni device, successfully promoting semiconductor science education across various counties and cities in TW. With support from the TSMC Cultural and Educational Foundation, we have established a K12 semiconductor science popularization platform centered on enjoyable learning.

Currently, we have secured the consent of TSMC, MIT, and the Scratch Foundation, and we are collaborating with experts from the Institute of Education for book authoring to demonstrate Taiwan's successful experience in semiconductor science popularization through partnerships among industry, government, and academia. Our efforts will extend to Hsinchu County and City, Taoyuan, and Kaohsiung, promoting the real cases. Building on Yang Ming Chiao Tung University's 60 years of dedication to semiconductor education, we are fulfilling our social responsibility for K12 semiconductor science education.

The primary goal of Belight AI Semiconductor is to engage K12 students in the classroom through Scratch animation games and the Rabboni AI sensory device. We emphasize explaining the semiconductor activation mechanism using students' existing knowledge of mathematics, physics, and chemistry, ensuring that we do not increase their academic burden. This approach maximizes their study time, encourages a solid foundation, and prepares them for future careers in various fields, allowing them to leverage semiconductor technology and enjoy its benefits. We welcome K12 students to build a strong foundation that will enable them to explore advanced theories at Yang Ming Chiao Tung University alongside esteemed professors.

Belight AI Semiconductor has officially applied for a trademark, led by the Silicon Guide R&D Center.