



University of Macau

Introduction of Incubation Teams

澳門大學 入駐團隊簡介

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澳門大學創新中心
Centro de Inovação da Universidade de Macau
Centre for Innovation of the University of Macau

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AW Medical Company Limited | 奧正醫療有限公司



Precision Cancer Therapeutic Decision Making 精準癌症治療的方案抉擇

AW aims to provide the best services to enhance therapeutic decision-making for precision cancer treatment. Our screening services cover all kinds of therapies, focusing on the screening of chemotherapeutic drugs for tumorectomy, liquid biopsy of leukemia and needle biopsy of superficial cancers. Meanwhile, we offer our clients screening service of biomarkers, especially those that are critical to the feasibility of targeted therapy.

奧正致力為精準癌症治療的治療方案抉擇提供最優質的服務。我們的服務範圍包括所有治療方案的篩選，尤其針對手術切除腫瘤，血癌的液態活檢以及表面腫瘤的穿刺活檢樣本的化療藥物篩選。同時，我們也可為客戶提供生物標記篩選，尤其是用於決定標靶治療適用性的生物標記篩選。

BayLife Tech | 澳門蓓涑生物科技 有限公司

An Ambient Cell-transportation System
幹細胞常溫運輸系統



We have developed a groundbreaking technology (Jiang, et al., Biomaterials 2017) that enables the storage of stem cells (e.g. human mesenchymal stem cells) under room-temperature and low-oxygen conditions for more than 10 days with ensured cell viability and functions, thus saving costly cryopreservation equipments and the corresponding process.

Stem cell therapy has been taking an increasingly important role in clinical application. It is widely used to help treat autoimmune diseases, inflammatory diseases, cancers, liver diseases, diabetes, etc. The market value of the stem cell therapy industry is expected to reach US\$100 billion by 2021.

The traditional way of storing and transporting stem cells requires dry ice or liquid nitrogen for cryopreservation. The whole process involves complex steps of freezing, transport, and recovery of the cells, and can cost up to US\$1,000 per case. Moreover, accidental thawing during transport will lead to immediate death of a cell. But with our patented technology, stem cells can survive long-distance transport across the world within 10 days at room temperature while maintaining the original viability. Besides, the cost is only about 1/10 of the price for cryopreserved delivery (6,000-10,000 RMB). This makes the long-distance transport of cells between stem cell centres and hospitals much easier, and researchers can also share stem cells more conveniently. Therefore, this technology is of great significance for both clinical application and scientific research.

本團隊提供一種細胞常溫運輸系統 (Jiang, et al., Biomaterials 2017)，在常溫、低氧條件下可以保證所儲運細胞 (以人間充質幹細胞為例) 的活性和功能達 10 天以上，而不再依賴費用高昂的冷凍保溫設備和凍存手續，開啟了細胞常溫運輸的新篇章。幹細胞治療在臨床應用上現在已經有很大的推廣，已廣泛應用於臨床實驗中的自身免疫性疾病、炎性疾病、腫瘤、肝病、糖尿病等。到 2021 年，幹細胞治療的市場將達到千億美元。

傳統的幹細胞儲存和運輸方式都需要乾冰或者液氮作為載體，該方式凍存、運輸以及復甦手續繁雜，每次的運輸費用高達上千美元，且意外解凍時細胞會立即死亡。採用我們的專利技術後，幹細胞可以在常溫環境下進行長途運輸，10 天之內可以運送到世界各地，並依舊保持原活性，且將運輸成本從 6,000-10,000 元人民幣降低約 10 倍。該產品大大方便了幹細胞中心與醫院之間的長途運輸，同時也方便了科研人員共享這些細胞，對於科研和臨床都具有重大意義。

HTAnalyzer | 高通量分析

CRISPR-Cas9 High-Throughput Screening Data Analysis
Software
CRISPR-Cas9 大規模篩選數據分析軟體



CRISPR/Cas9 System has been applied to a variety of organisms for its efficient genome editing function. The demand for analytical technologies in CRISPR/Cas9 high-throughput screening is urgent in the field of biomedical research, which will be the most important market for these technologies in the future. Currently, the method of data normalization has been widely used in analyzing the high-throughput data of gene function. However, there are no clear steps of quality control and principles for target selection in the method of normalization. Therefore, it is difficult to guarantee that the false positive and false negative rates of the analyzed results are within an appropriate range, which will lead to incomplete and inaccurate information. There is a lack of an integral software that integrates experimental design and data analysis specified for CRISPR/Cas9 high-throughput screening. Therefore, we hope to develop a professional data analytic software that offers personalized data analysis services for researchers engaged in CRISPR/Cas9 high-throughput screening studies. This software will enable researchers who are not expert in data analysis to complete the experimental design and data analysis for CRISPR/Cas9 high-throughput screening professionally. Besides, the software can help optimize experiment design and data quality control principles, reduce waste of time and materials, thus accelerating the test process and enhancing efficiency.

CRISPR/Cas9 系統的高效基因組編輯功能已被應用於多種生物。CRISPR /Cas9 大規模篩選分析技術是生物醫藥研究領域的亟需產品，是未來這一領域最重要的市場。目前大部分基因功能高通量資料的分析中運用到了資料歸一化的方法，但是沒有明確的質控步驟和目標物選擇原則。這樣就很難保證結果的假陽性和假陰性率控制在合理的水準下，進而造成潛在的資訊挖掘的不完整和不準確。目前市場上沒有成套的針對 CRISPR /Cas9 高通量篩選試驗特點的試驗設計和資料分析軟體，因此，我們為從事 CRISPR /Cas9 高通量篩選試驗的科研工作者提供一套專業的資料分析軟體和個性化的資料分析服務。此軟體可以使沒有統計專業知識的科研人員也能完成專業的 CRISPR /Cas9 高通量篩選試驗設計和資料分析，提供最優化試驗設計和資料質控原則，加速試驗進程，降低時間和材料浪費，提高試驗效率。

Global Mind Tay Advanced Medical Technology | 環宇邁泰先進醫療 技術

Quantitative Photoacoustic Dermoscopy of Diseased Human Skin
定量的光聲皮膚鏡技術運用於診斷人體皮膚病



In this project, we develop a multispectral photoacoustic dermoscope imaging system for the obtaining of quantified, high-resolution and high-contrast images of diseased human skins, which contain functional information. The self-designed PA probe allows for light-sound confocal stimulation and reception. To be exact, it integrates a focusing lens, an ultrasound probe and a coupling device together to facilitate clinical practice. The PA dermoscope imaging system, which generates high-resolution functional images, is used to inspect the epidermal and dermal structures in healthy people and patients. From the images, we can obtain the characteristic parameters of skin diseases, including pigment distribution, thickness, vascular diameter, and depth. It is expected that PA dermoscopy can serve as a potential tool for the diagnosis and curative effect evaluation of human skin diseases. The completion of the project will provide us a way to improve the present clinical practice of curing diseased skin and bring in a new technology for diagnosing diseased skin and monitoring in vivo the skin's response to medical treatments. Moreover, it will help to keep track of the drug effects on skin diseases of particular typos as to boost the cure rate.

該項目主要開發一套多光譜光聲顯微皮膚鏡成像系統，用於獲取定量的高分辨、高對比的皮膚病功能資訊。該光聲探測器是自主設計，可以實現光學和聲學共聚焦激發和接收的功能，具體地說，整合了一個聚焦物鏡，一個超聲探頭和一個耦合裝置用於固定手部皮膚。該光聲顯微皮膚鏡成像系統可以用來檢測健康人群和患者的皮膚和真皮結構的高解析度的功能圖像。我們通過該成像方法可以做到診斷皮膚疾病的特徵功能參數，包括色素分佈、厚度、血管直徑、深度等。相信該技術可作為人類皮膚病診斷和療效評價的一種潛在工具。該項目的成功完成將為我們提供一種改進現有的病變皮膚臨床實踐的方法，同時也將為我們帶來一種新的技術用於診斷患病的皮膚並在體內監測皮膚治療過程的反應，更將為特定類型的皮膚病的藥物反應提供監測，從而提高患者的治癒率。

Great Bay Diagnostics | 大灣診斷

Molecular Diagnostic on Microbial Pathogens
微生物致病菌的分子診斷技術



The rapid emergence and spread of antibiotic-resistant pathogens lead to the demand for accurate diagnosis before treatment. In addition, southeast China is the most frequently stricken region by new highly infectious diseases. Therefore, globally and locally, there are extensive potential markets for the development and commercialization of molecular diagnosis, which are significant for accurate diagnosis of antibiotic-resistant and new infectious pathogens. Our goal is, by developing and commercializing the Taqman probe technology, to conduct pre-treatment diagnosis and examination of common antibiotic-resistant pathogens (e.g. Methicillin-resistant Staphylococcus aureus, Vancomycin-resistant Enterococcus, and Acinetobacter) and viruses that usually break out in China (e.g. influenza virus A/B, Norovirus, Dengue virus) with real-time PCR molecular diagnostic reagents. In addition, we will closely monitor the outbreaks of new virus infections and develop corresponding diagnostic assays as needed.

抗生素耐藥性病原體的迅速出現和廣泛應用需要在治療前進行準確的診斷。此外，中國東南地區是最容易出現高頻率的新發感染疾病的地方。分子診斷的發展和商業化，對抗生素耐藥和新出現的感染性病原體的準確診斷，在全球都有巨大的潛在市場。我們的目標是通過開發和商業化 Taqman 探針技術，以即時 PCR 分子診斷試劑對常見的抗生素耐藥病原體（如耐甲西林金黃色葡萄球菌、萬古黴素耐藥性腸球菌、不動桿菌）和在中國經常爆發的病毒（流感病毒 a/b、諾如病毒、登革病毒）進行治療前的診斷和檢驗。此外，我們將密切監測新病毒感染的爆發，並根據需要開發相應的診斷化驗。

TMASS Technology Co. Ltd | 天鐳科技有限公司

Next Generation Protein Analytical Products and Services for Clinical and Research Markets

對向臨床和研究市場的新一代蛋白質分子檢測產品和服務



TMASS Technology Co. Ltd was established in 2018. It is the first Macau-based high-tech company that applies mass spectrometry (MS) to qualitative and quantitative analyses of protein molecules, especially those associated with human health and diseases. TMASS targets at the global clinical and research market, and offers one-stop solutions for protein analysis, biomarker assay kits, protein sequencing and PTM analysis services, as well as consultancy services in protein/proteome analysis. Based on our 7 patent pending inventions, we provide flexible and cost-effective products and services of high specificity and accuracy to clinical and academic researchers in Macau, Hong Kong, Chinese Mainland and other parts of the world.

天鐳科技有限公司成立於 2018 年，是澳門首家利用質譜技術從事與人類健康和疾病緊密相連的蛋白質分子分析和定量的高科技公司。公司面向全球臨床和科研市場，以 7 項擁有自主智慧財產權的先進創新性技術為依託，以其高特异性，高精確性，高靈活性以及低成本的優勢，為澳門、香港、中國大陸以及全球的臨床研究人員和科研工作者提供包括蛋白質分析和定量方法的設計，試劑盒訂制，以及技術研發的一站式解決方案。

InforMed Therapeutics

Development of Anti-tumor CAR T Cells with Multiplex Genome Editing

CRISPR-Cas9 編輯的 CAR-T 細胞抗腫瘤技術



Leukemia is a common, high-mortality-rate and malignant disease of the hematopoietic system. Recently, there is a new effective cure for the disease—Chimeric Antigen Receptor T-Cell Immunotherapy (CAR-T)—whose application prospect has been widely recognized by researchers, medical companies, hospitals and patients. The CAR-T therapy enables the transformation of immune cells in cancer patients, whose disease can thus be alleviated and even cured under low-trauma conditions as possible. In order to enhance the cancer-killing capability of the T-cell, we plan to design a new generation of immunotherapy technology, which allows for precise integration of CAR genes with any genome in immune cells by gene-editing.

白血病是一類常見的死亡率較高的造血系統惡性疾病。嵌合抗原受體 T 細胞免疫療法 (Chimeric Antigen Receptor T-Cell Immunotherapy, CAR-T) 作為一種新型有效的白血病治療方式，通過對自身免疫細胞的改造，使癌症患者在盡可能低創傷的條件下逐漸緩解病情，提高治療的可能性。其應用前景已得到廣大科研人士、醫藥公司、醫院和患者的逐步認可。我們將建立建立新一代的免疫細胞治療技術，利用基因編輯技術將 CAR 基因精準整合在免疫細胞任意基因組位置，提高 T 細胞殺傷腫瘤的能力。

Genetrump | 金創克

Wound Dressing Made of Natural Chinese Medicine
Ingredients

天然中藥成分醫用敷料



The “Genetrump” series, medical dressings targeted at chronic wounds and burns, has the following characteristics:

1. Natural Chinese medicine ingredients that specifically regulate the wound-healing-related cell populations and the wound microenvironment;
2. Bionic nanofiber structure that can perfectly replace lost tissues in wound and enables rapid wound healing;
3. Safe, non-toxic and user-friendly dressing of good adhesion, which accelerates the repair of skin tissue with its multi-functions including wound isolation, stypcity, moisturizing, ventilation, anti-infection, and anti-inflammation.

針對慢性和燒傷兩種難以癒合的傷口，將傳統中藥和現代納米技術結合，創造出專業的傷口敷料“金創克”。

我們開發的“金創克”系列醫用敷料專門針對慢性傷口和燒傷傷口，有以下特點：

1. 天然中藥成分可以特異調節傷口愈合相關細胞群，調節傷口微環境。
2. 仿生納米纖維結構可完美補充傷口缺失組織，促進傷口快速愈合。
3. 敷料傷口黏附良好，安全無毒，應用方便，在隔絕創面的同時又有止血，保濕，透氣，抗感染，抗炎作用，有效的促進皮膚組織的修復。

JunRui Eco-antibiotics | 軍瑞環保型 抗生素



The World Health Organization has warned that we are moving towards a “post-antibiotic” era where the increasing drug-resistant bacteria will deny the effects of drugs and severely threaten the health and survival of humans. Scientists from JunRui Eco-antibiotics Company Ltd. have created an eco-friendly antibiotic that consists of two parts—an “precursor” and an “activator”—by means of “super molecular cross-linking”.

The “precursor” itself does not have any antibacterial effect, and has to be activated by adding the “activator” before use. That’s to say, as long as the two components of the antibiotic are produced and stored respectively, their exposure into the environment, intentional or accidental, will not cause any pollution that trigger the antibiotic resistance of bacteria. What’s more, the activated antibiotic can be de-activated with an inactivator. The research team has chosen the low-molecular-weight polyethylenimine (PEI) as the antibacterial precursor and the cucurbituril [8] (CB[8]) as the activator. Hyperbranched cross-linking is conducted on the PEI, whose activity can be precisely tune. The solution has been proven effective on four types of bacteria. The above mentioned research results has been published on *Chemical Communications* recently.

世界衛生組織警告稱，“後抗生素”時代正在逼近，愈來愈多細菌將對抗生素產生耐藥性，全球將面臨藥品無效，嚴重威脅人類的生存和健康。軍瑞環保抗生素有限公司的科研團隊以“超分子交聯”設計，開發“環保型抗生素”創新概念，提出了抗生素“前驅體”和“啟動劑”的概念：“前驅體”沒有抗菌活性，使用時加入“啟動劑”即可產生殺菌效力；人們只要把“前驅體”和“啟動劑”分開進行生產和儲存，即使被故意排放到環境中，或因意外原因洩漏到環境中，都不會造成環境污染而促使耐藥菌進化。

其科研團隊選用小分子量聚乙烯亞胺（PEI）作為抗生素前驅體。八元葫蘆脲作為啟動劑，將小分子PEI進行超支化交聯啟動且精確控制其活性。此外，啟動的抗生素亦可以被滅活劑滅活。該方案已在四種不同類型的細菌菌株上均驗證有效。根據該設計方案，人們只要對前驅體和啟動劑分開進行生產和儲存，即使它們被故意排放到環境中，或由於意外原因洩漏到環境中，都不會造成環境污染，進而促使耐藥菌的進化。相關成果已於近期發表在《Chemical Communications》。

Macao Pine Cottage Biological Technology | 澳門松草堂生物科技

Healthcare Product made from *Cordyceps Sinensis*

蟲草菌絲體保健品



Macao Pine Cottage Biological Technology Co. Ltd., headquartered in Macao, China, is a company engaged in the development and sale of herbal healthcare products. It is backed up by the State Key Laboratory of Quality Research in Chinese Medicine, and Institute of Chinese Medical Sciences (University of Macau). Combining traditional Chinese medicine with modern biotechnology, the company provides services including the production and sale (wholesale and retail) of healthcare products and food (export licenses are not concerned), and Chinese herbal medicine research and test development (restricted and prohibited tests are not involved).

We have successfully created a healthcare product made from *Cordyceps sinensis*, which can help cure lung diseases caused by environmental pollution (e.g. haze). Its functions include: nourishing and strengthening the body, regulating the immune system, and improving the respiratory system, etc.

With the aim of helping the public to stay healthy, we are dedicated to developing new technologies and products beneficial for people's health and life quality. In addition, we have established a sophisticated quality inspection system for Chinese herbal medicines, in the hope of serving the public with products that are healthy, effective and safe.

澳門松草堂生物科技有限公司，是一家從事中草藥健康產品開發與銷售的公司，總部位於中國澳門。公司依託澳門大學中華醫藥研究院中藥質量研究國家重點實驗室為後盾，結合傳統中醫藥與現代生物科技，包含生產、銷售（批發、零售）保健品、食品（不涉及出口許可證）、中草藥研究與試驗發展（不含限制和禁止類）等服務。

本公司現已成功研發一款蟲草菌絲體保健品。該產品針對日益嚴重的霧霾污染而打造，具有滋補強身、調節免疫、改善呼吸系統功能等功能，是一款能夠有效緩解並調理由霧霾等環境污染問題引起的肺部疾病的抗霧霾保健品。

公司建立了精密的品質標準檢驗體系，以“固本培元、健康人生”為宗旨，關注中草藥品質問題，利用新技術，開發新產品，注重人類健康問題和生命品質的提升，以期為廣大群眾帶來健康、有效、安全的保健產品。

RJC&Co BioTech

New Antidote for Paraquat and Human-friendly

Nano-paraquat

新型百草枯解毒劑及人類友好納米百草枯



Each year there are around 100,000 deaths from pesticide self-poisoning worldwide and the deadly paraquat (PQ), which is commonly used as a herbicide in many countries. As it is being used in nearly 90 countries and regions, intentional or accidental ingestion of PQ can result in rapid multiple organ dysfunction syndrome with a mortality rate exceeding 60%. Current clinical treatments of PQ poisoning include gastric lavage, anti-oxidant therapy, immunosuppression, hemoperfusion, hemodialysis, resuscitation and adjuvant care. Unfortunately, none of them have been demonstrated effective. And there is still no specific antidotal therapy for PQ poisoning to date. This project aims to develop an oral antidote, which could inhibit the absorption of PQ and reduce its toxicity after blending with this poison in gastrointestinal, hence increasing the survival rate of patients. Meanwhile, we are working to develop a new type of PQ which is sunlight-responsive, weeding-effective, and of lower toxicity to humans.

世界範圍內，每年大約有 10 萬人死於農藥中毒，其中能夠引起死亡的百草枯正作為一種除草劑廣泛使用在很多國家。誤服或者主動吞服百草枯能夠迅速引起多器官衰竭，其死亡率超過 60%。目前有 90 多個國家及地區正在使用。針對百草枯中毒，臨床中多採用洗胃，抗氧劑，免疫抑制劑，血液灌流及透析，急救及輔助療法進行救治。但是臨床統計卻都被證明無效。到目前為止，仍沒有特異有效的解毒劑。此專案擬開發一種口服的解毒劑，其能夠在胃腸道與百草枯結合並減少百草枯的吸收，從而減輕百草枯的毒性，增加生存率。同時，開發一種具有太陽光回應性的百草枯新劑型，使其保證除草效果的同時降低對人體的毒性。

A Minute Unmanned Supermarket | 分分鐘無人超市



A Minute is an unmanned supermarket that provides on-campus 24/7 service. Easy, time-saving, embarrassment-free—that's the kind of shopping we offer. Moreover, this running model enables large-scale operation and can perfectly solve problems like human resource shortage and high operation cost. We are committed to creating an online-plus-offline business ecosystem, which allows for fast, one-stop services (ordering and home delivery of goods and food) within a few taps on mobile. Based on the Internet and the Internet of Things, we have integrated hightechs such as artificial intelligence and RFID to offer a 360-degree unmanned and personalized consumption experience. Anytime For You, always at your service.

分分鐘無人超市，定位校園，7*24 小時為您服務。進店購物只需一分鐘，更多便捷，更能避免尷尬。完美解決了無人值守，商店運營成本高以及難以規模化的問題。分分鐘致力打造線上線下生態圈，一鍵下單，送貨，送餐，送快遞上門。一天三次分分鐘，幫您省下一個鐘。

分分鐘以互聯網，物聯網為基礎，融合人工智慧、RFID 等高新科技，實現從進門到挑選商品、從支付到出門 360 度無人化消費體驗，打造從送貨上門到個性化需求，智慧生活社區服務平臺，您的歲月靜好，是我們的如影隨形。

Alpha Table | 智慧餐飲服務平臺

An Integrated and Smart Catering Service Model
融合及智慧餐飲服務模式



To solve the current problem of low efficiency in the catering industry, we are committed to creating a brand new smart catering service model that integrates online and offline services with big data analysis. In this model, automatic elements are injected to reduce labor and other costs, and thus enhance operational efficiency and revenue. The model also helps restaurants to improve management, analyze data, and realize accurate marketing. At the same time, it provides diners with new dining services, such as real-time online booking and queuing (which saves the trouble of on-site queuing), self-help ordering via mobile, and mobile payment.

解決目前餐飲業的低效率運作模式，為餐廳注入自動化元素、降低人力成本、提升營運效率、開源節流、完善管理、分析數據、精準行銷；為顧客提供實時線上訂位排隊、優化現場排隊等候、手機自助點餐結合移動支付等的新餐飲體驗。透過線上線下融合和大數據分析，致力打造全新的智能餐飲服務模式。

Barra Studio

AR Interactive Marketing Platform
AR 互動營銷平臺



Barra Studio is a Macao-based AR content production company dedicated to creating AR applications with multiple functions (production, marketing and entertainment) for various industries in different regions.

Our main product is the interactive marketing platform Barra AR, which serves as a medium to realize AR branding and marketing. It not only showcases the interactive AR contents we designed for different brands, but also allows the users to share what they feel about the interactions in our online community. The four functions of the platform include: image tracking, model interaction, special facial effects and sharing. All needs for AR interactions in various scenarios and sectors can be met through our platform.

We offer all-around services (from scenario design, technology development, content production to platform operation) that can meet the existent or potential market demands. And our platform has its own competitive advantages which lie in its unique services and comprehensive scenarios.

Barra Studio 是一家建基在澳門的 AR 內容創作公司，致力於為各地區各行業打造具提高生產力、營銷娛樂功能的 AR 應用。

Barra AR 互動營銷平台是公司的主要產品，作為實現 AR 品牌營銷解決方案的載體，一方面為用戶帶來我們為品牌設計的 AR 互動，同時亦能讓用戶在社區上分享互動當中的樂趣和感受。平台的四大功能包括：圖像追蹤、模型互動、人臉特效、分享社區，各行業各場景的 AR 互動需求都能在同一平台上得到滿足。

從應用場景、技術開發、內容設計、平台營運，Barra Studio 的全方位的服務能滿足市場已出現或潛在的應用需求，服務的獨特性和場景的全面性構成平台的特色和競爭優勢。

BidEATS | 拍著吃

Food Voucher Auction Platform
美食優惠券拍賣平臺



What is BidEATS?

BidEATS is a food voucher auction platform that adopts the Dutch auction. Whenever a user presses the “Bid” button, the price of the food voucher will drop randomly and the discount is system-generated. The lowest possible price for every voucher can be as low as HK\$1.00. A deal is made when the first user (bidder) makes a bid.

BidEATS 是甚麼？

BidEATS 是一個美食優惠券的拍賣平台，方式參考荷蘭式拍賣（又名鬱金香拍賣），將美食券的拍賣價格隨著按“拍賣”鍵的次數而遞減，每次的折扣均為系統生成的隨機數（所有美食券的底價是 HK\$1.00），直到第一個用戶（或競買人）應價時擊槌成交的一種拍賣。

deliver2u | 樂送

Truck Hiring Platform
貨運配對平臺



Deliver to you(Deliver2U) is a truck hiring platform that aims to become the most popular truck hiring mobile application in Macau. Now Deliver2U provides instant booking service for motor bikes, small vans and trucks with a 3.5-ton or 5-ton load capacity. Both the IOS and Android versions of the App are available at present.

Our mission is "deliver everything to you", with a 24-hour logistics platform that can meet your needs anytime. No matter how large or small your item is, it just takes you a few taps to get a driver at your service.

The user in demand of a van may order with our App, and our system will help send an available van automatically. This is an easy and convenient way that saves the user from making calls one by one for the price and arrival time.

When a strong logistics team has been built up, Deliver2U will also serve the tourists to Macau by offering smart travel and logistics solutions. In this way, we can help improving the travel experience of tourists as well as expanding the local logistics market.

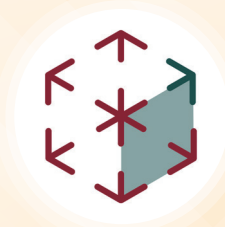
樂送是一個貨運配對平台，用以打造成以澳門為本且受歡迎的電召貨車手機應用程式。平台上目前提供電單車、小貨車、3.5 噸貨車及 5 噸貨車。樂送目前提供了 iOS 及 Android 版的 APP。

樂送宗旨為“為您運送任何貨物”。我們提供 24 小時的物流平台，滿足你全天候的需要。貨物無分大小，只需要一個手機就可以向全澳加盟司機發單。

我們主要解決當需要貨車時，客戶只需要使用 APP 下單。系統便可以自己為他配對一輛車，由現時逐個電話諮詢價錢及時間轉為輕鬆、簡單、方便。樂送在建立強大的物流車隊後未來亦會推出針對來澳旅客，提供智慧旅遊和物流方案。讓旅客體驗前所未有的輕鬆愉快的旅遊體驗，亦為本地物流服務開拓更大的市場。

eCity

App Platform Provides Diverse Services About Activity Data
Management and Analysis
多元活動數據管理分析交流平臺



Based on the concept of 'Smart City', eCity is an app platform that provides clients with user information, as well as diverse services about activity data management and analysis. It connects the promotion of activity-based products with the everyday life aiming to make commercial activities, educational programmes and civic education activities more enjoyable for the participants. The sectors and customers that we serve include: tourism (shops, museums, and restaurants); education (schools and educational organizations); commerce (companies and shops); and civic education (governmental organizations). In tourism, the eCity app (with facilities like map mode, AI mode, image recognition and GPS tracking) provides services including tourist route design, task design interactive games, scenario-based bespoke data management—all for the purpose of enhancing experience in using the tourist products. In education, our experienced team will develop supporting apps for experiential learning activities and cultural creative courses, which help students to be involved and meet the needs of schools and educational organizations in teaching improvement and management. In the commercial or civic education contexts, eCity helps companies, shops or governmental units to integrate their products or services with tourist route service as part of their marketing scheme.

eCity 是一個為客戶提供多元活動數據管理分析和用戶資訊的交流平台，把活動型產品的推廣生活化，完善商業活動、教育課程、公民教育的體驗。eCity 主要服務領域與對象包括：旅遊（商店、博物館、食肆）、教育（學校、教育團體）、商業活動（公司、商店）、公民教育（政府機構）等。旅遊方面，eCity 通過運用手機應用程式的一些功能（例如：地圖模式、AI 人工智能模式、影像識別、GPS 定位功能）為客戶提供旅遊路線設計、產品導覽、遊戲任務設計、針對特定場景定制數據管理功能等服務，優化用戶對旅遊產品的體驗；教育方面，我們的團隊擁有豐富教育和文創經驗，透過配合有關的活動型功能，配套開發體驗式教育或文創課程 APP，滿足學校或教育機構的實際需求，加強學生對課程的投入程度，優化教學和教育管理。商業和公民教育方面，eCity 為公司、商店或政府機構的產品或生活體驗設計融入路線體驗加強產品或體驗推廣。

Fever Design | 非凡設計

Graphic Design Match-up Online and Mobile Platform
平面設計手機及網上一站式平臺



Nowadays, it is difficult for small and medium-sized enterprises (SMEs) to find a suitable graphic designer. The reasons are various: high cost of hiring senior designers, unguaranteed design quality, inconvenient project tracking, and ineffective communication and management. On the other hand, freelance designers who lack skills in publicity and marketing often struggle for stable sources of income. Therefore, the online mobile platform FeverDesign is established to match up graphic designers and SMEs.

Platform Introduction

Design Showcase-Designers are free to publish their works, which are categorized by the platform according to the sector and the type of product that are concerned. This makes it easier for customers to learn about the designers and find the right one.

Online Matching-Enterprises may offer design jobs through the platform or directly contact their favorite graphic designers. The platform acts as a coordinator for both parties throughout the design process.

Online Project Tracking-The traditional way of sending and checking draft designs by email can be time-wasting. FeverDesign can make the process more efficient by allowing users to mark and comment directly on online drafts. The system, with the "tracking" facility, can record changes made by both sides. All drafts are stored in a cloud database. Customers are able to communicate with designers online to keep track of the design process and set deadline reminders (e.g. 2017/8/1 - complete the draft design).

FeverDesign 是為解決中小企難以找到合適平面設計師、對稿不方便及設計師質素參差而衍生的手機及網上一站式平台。

對中小企來說，設計師成本高、質素參差，年資高的，人工昂貴。老闆又不懂設計，難以溝通及管理。自由設計者則收入不穩定，不懂宣傳開發客源。FeverDesign 就是為平面設計師及中小企建立橋樑而生的平台。

平台介紹

設計案例 - 設計師可以自由發佈設計案例，用家可透過案例了解設計師。案例會按行業及宣傳品種類進行分類，方便找尋適合的設計師。

線上對接 - 企業可以通過平台發佈設計任務或選擇心儀平面設計師直接對接，平台會擔任協調的角色協助雙方有效地完成整個設計過程。

線上對稿 - 現時對稿是透過電郵來確認設計內容，過程相當費時。FeverDesign 讓用戶直接在線上設計稿上標記問題、意見，系統內含「追蹤修訂」的功能，記錄雙方修訂內容，所有稿件存放在雲端保存。企業可以在設計稿上跟設計師線上溝通，了解設計的進度，並定立階段性的提示信息，如：2017/8/1- 完成設計草圖。

GinBike | 小金單車

Smart Dockless Shared Bicycle for Campus
針對校園的智能無樁共用自行車



GinBike is a smart dockless shared bicycle designed for campus use. To meet the unique need for bicycle on campus, our company produces quality shared bicycles equipped with Bluetooth smart locks and GPS trackers. Stylish-looking and environmentally friendly, these bikes are the best vehicles for students on short trips. Improving the use efficiency of bicycles is good for the optimization of campus resources, as well as the creation of a green, civilized and clean campus which is more attractive. GinBike makes the "last mile" of smart public travel possible in the UM, thus helping to create a cleaner and more orderly campus environment.

小金單車是針對校園場景研發的智能無樁 共用自行車。從校園獨特的自行車需求出發，生產配備藍牙智能車鎖、GPS 定位系統的高質量共用自行車，單車外觀設計新穎時尚，理念綠色環保，是學生短途出行最佳的代步工具。通過提高單車使用效率，減少資源閒置同時釋放校園內的道路資源，能為校園營造綠色、文明和整潔的環境，提高校園整體魅力。GinBike 將“最後一公里”的智能公共出行帶入澳門校園，共築更整潔有序的校園環境。

Park Park Easy | 泊泊易

Intelligent Roadside Parking Guidance System 智能路邊泊車引導系統



This system features the integration of dynamic management, intelligent guidance and automated payment, aiming to achieve low-cost, efficient and precise management of public parking in Macao. Based on a “front-end equipment + cloud system” platform, the system combines multiple technologies (e.g. cloud computing, the Internet of cars, mobile app, car detecting and parking guidance) that enable smart guidance and online/offline payment services for indoor or outdoor parking.

Current problems of roadside parking:

1. Traffic congestion caused by vehicles lacking parking guidance;
2. Problems brought by the traditional parking charge system (e.g. management difficulties, inefficiency, heavy reliance on human resources);
3. Inefficient human-labor-based regulation enforcement and penalty collection.

Here are what we can do:

1. Increase parking turn-over rate and solve the “zombie car” problem and provide data for law enforcement;
2. Increase the use rate of parking spaces by directing vehicles nearby or cooperating with neighboring shops.

Our innovations:

1. Interrelated ecosystem;
2. Intelligent customer service system;
3. Internet-based operation and management model;
- and 4. One-stop services of parking guidance and management.

構建本澳路邊泊車的動態管理、智能引導、自動繳費一體化解決方案。體現低成本、高效率、精準管理的城市智慧。

構建：路邊車位引導，線上線下付費，室外室內停車雲平台

打造『前端設備+系統雲平台』的智慧路邊泊車位管理雲平台系統結構，結合計算概念及技術、車物聯網技術、移動手機 APP、車輛探測器、車位引導技術。

路邊停車痛點：

1. 車輛來回找車位，非常占用道路通行時間。
2. 傳統的停車收費系統會以工人進行收集，導致管理困難、執行時間慢，需要人員多。
3. 在違規執法上，只能靠人力進行訊息收集，增加執法時間。

路邊停車解決：

1. 解決「僵屍車」問題，提高周轉率並提供更多執法數據；
2. 按使用率引導附近的車位或為附近商店做商業合作。

產品創新性：

1. 互通互聯的生態系統；
2. 智慧化的客服體系；
3. 互聯網思維的運營管理模式；
4. 從服務停車到管理停車

Mobot

Travel Booking Platform Based on a Chatbot Interface 旅遊聊天機器人



Mobot is a travel booking platform based on a chatbot interface. After the passenger have answered a few simple questions from Mobot (such as time budget, travel style, etc.), a real-time itinerary will be recommended. Mobot will also provide other services including smart ticketing and AI customer service. The project won the Excellence Award in the Smart City Design Competition held by FDCT and the Bronze Award in the third China College Students’ “Internet+” Innovation and Entrepreneurship Competition.

Mobot 是一個基於聊天機器人介面的旅遊體驗預訂平台。旅客回答 Mobot 機器人幾個簡單問題後（如允許時間、行程風格等），便可得到實時行程推薦。同時，Mobot 將提供電子購票及客服機器人等功能。該項目曾獲澳門青年智慧城市方案設計比賽優異獎及第三屆中國「互聯網+」大學生創新創業大賽銅獎。

Wright Energy Technology | 澳萊特能源科技有限公司



Sodium-Air Battery

鈉 - 空氣電池

Field description: To improve the competitiveness of the auto-industry, ensure energy security and develop a low-carbon economy, industrializing new energy vehicles has become a globally recognized strategy and a major issue for China's science and technology development. The sodium-air battery, which attracts great scientific interest with its 3-to-10-times-higher energy density than a lithium-ion battery, is expected to be applied in new energy-powered automobiles as a power source comparable with oil.

Core competitive edges:

1. Completely independent R&D;
2. Long extended mileage;
3. Low cost;
4. World-leading new energy battery technology created in China.

Market demand: In addition to the electric vehicle industry, sodium-air batteries can also be used in mobile phones, computers, cameras, stationary energy sources, commercial emergency generators for hospitals and data centers, general-purpose generators, mobile houses, driverless vehicles and so on.

Potential partners: Huawei, Apple, Lenovo, Dell, Chery, Build Your Dream (BYD), BAIC Group, Nikon, Canon, etc.

核心領域：為提高汽車產業競爭力、保障能源安全和發展低碳經濟，新能源汽車產業化已成為國際汽車產業界的戰略共識和我國科技發展的重大戰略需求。鈉-空氣電池因具有高於鋰離子電池 3-10 倍的能量密度而成為在新能源汽車的電源體系中可以與石油相媲美並被寄予厚望的儲能裝置。

核心競爭力：

- 1、完全自主研發。
- 2、續航里程最長。
- 3、產品成本最低。
- 4、中國首創，國際領先，填補國內新能源電池技術空白。

市場需求：鈉-空氣電池除應用在電動汽車行業中外，還可以應用於手機、電腦、相機、固定能源，如醫院、資料中心用商業應急發電機，通用發電機以及可移動房屋、無人駕駛汽車等。

潛在合作企業：華為、蘋果、聯想、戴爾、奇瑞、比亞迪、北汽、尼康、佳能等

South-Utron Online Education Studio | 南國優創互聯網教育 工作室

International Chinese Language Webucation Platform

國際漢語網路教育平台



Supported by the University of Macau, South-Utron Online Education Studio is committed to becoming a world-leading operator of international online Chinese education. Based on a modern advanced Internet platform, we are working to promote quality and professional Chinese education with a global view. With the business philosophy of “Internet+Chinese+Education” and the “Platform+Content+Service” operation model as the two cornerstones, South-Utron aims to help the existent Chinese training institutions (e.g. universities, colleges, government agencies, and private training centers) to design, promote and share their quality online courses. In this way, we also hope to promote the reform of Chinese education and training.

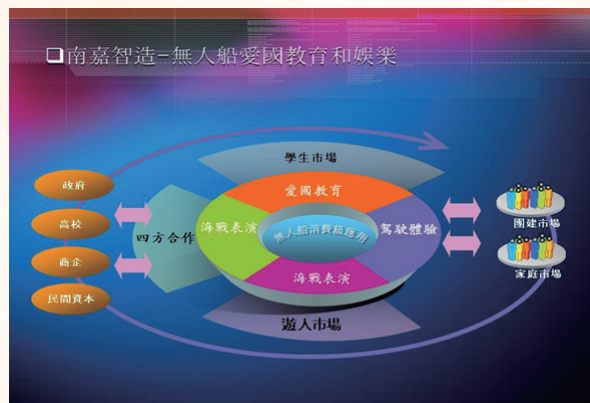
南國優創互聯網教育工作室，得益於澳門大學的支援，正致力成為國際領先的國際漢語互聯網教育運營商。南國優創互聯網教育工作室，是一個通過利用現代先進技術和互聯網平臺，將中國的漢語培訓逐步推向專業化、優質化和國際化的教育平臺運營機構。基於“互聯網+漢語+教育”的理念和“平臺+內容+服務”業務模式這兩個基石，本平臺的目的在於幫助現有的漢語培訓機構（例如高等院校、政府漢語培訓機構、民間漢語培訓中心等）完成其優質課程的線上設計、推廣和分享，以逐步推動未來漢語培訓和教育模式的改革，並致力於成為未來國際領先的互聯網漢語教育運營商。

Nan Jia Zhi Zao Limited | 南嘉智造

Unmanned Surface Vessel of Consumer-Level in Application of Education and Entertainment

無人船愛國教育娛樂項目

Nan Jia Zhi Zao Limited, a project launched by a group of UM students, focuses on the application unmanned surface vessel (USV) in consumer-level education and entertainment. Featuring inter-disciplinary cooperation, the project goes beyond campus with an aim to promote patriotic education in a fun way and increase relevant consumption demand.



The project is motivated by patriotism and the love of Macau. Against the backdrop of the "Guangdong-Hong Kong-Macau Big Bay Area" and the "Belt and Road Initiative", we target at the extensive market of patriotic education, taking the advantages of Macau and Zhuhai (e.g. excellent geographic locations, mature tourism and hotel industries). Our short-term goal is to exploit the role of USV in entertaining performance and patriotic education. In the long run, we will work with the governments of Macau and Zhuhai to establish the first mobile cultural and creative industry park of the country to combine patriotic education and entertainment.

南嘉智造 - 無人船愛國教育和娛樂，是一項由澳門大學在校學生發起，圍繞無人船在教育及娛樂中的民用消費級的應用，借助跨學科的聯動，從校內走向校外，不斷提升人們消費需求，以寓教於樂的形式，培養愛國主義教育的項目。

項目源自於：愛國愛澳，澳門人的家國情懷。結合時下的“粵港澳大灣區”、“一帶一路”、“海上絲綢之路”等難得的機會，借助澳珠兩地優良地理位置和成熟的旅遊、酒店業的經驗，瞄準愛國主義教育的廣泛市場需求。

短期部分是開發無人船在表演娛樂和愛國教育的相關功能。長期部分是聯合澳珠政府，打造全國首家流動的愛國主義主題的教育娛樂文化創意園區。

