PARTNER COMPANIES ONBOARD RUN 1

1.

CargoAI is the first and only air freight booking marketplace that uses data and AI technology to provide Forwarders and Airlines alike the best possible rates and data analytics. CargoAI generates personalised reports based on current market trends, route price history, previous orders, space availability and price.

Project: Full-Stack Developer
As a Trainee, you can look forward to producing scalable software solutions in the logistics marketplace space. You will be part of a cross-functional team responsible for the full software development life cycle – from conception to development. Here are some examples of features on CargoAI's current roadmap that you might work on - API and integrations projects with airlines systems, yield management and pricing tool for airlines, web scraping and parsing bot, ongoing optimisation and improvement, data analytics and dashboards.

2.

Cloudsine is an up-and-coming cloud and Cybersecurity technology company headquartered in Singapore that provides consulting services to help customers adopt, secure and innovate in the public cloud such as AWS, Azure or Google Cloud. Also, they have a unique cloud security product, WebOrion® - it uses patent-pending technologies to provide their clients with a unique set of counter measures against web hackings including defacements, ransomware, DDOS, Blackhat SEOs, etc.

Its flagship cloud software, WebOrion®, is used by large enterprises such as Banks, Government, Telcos, and Large Forbes Global 2000 companies spread across Asia such as Australia, Indonesia, India, Philippines, Hong Kong and Singapore.

Project: Cloud Software Engineer
As a Trainee, you will be developing new features and enhancements to our Cybersecurity platform, WebOrion®, built to detect visual web defacements and invisible script hackings such as card-skimming.

You will be involved in adding new features for the platform which includes adding on an analytics dashboard, improving detection algorithms and optimising the cloud architecture using containers, serverless and various other leading cloud services from AWS.

3.

⫶STACS
Designed for Finance

STACS is an award-winning Singapore FinTech development company with a vision to provide transformative technology for the financial industry, with their complete infrastructure of live institutional platforms that make global markets simpler. STACS provides green finance and Environmental, Social, and Governance (ESG)-enabling infrastructure that leads the way forward by digitalising assets and processes. STACS aims to empower financial institutions to unlock massive value and discover new opportunities through our technology.

Project: Green Financing on the STACS Blockchain
As a Trainee, you will be working on a full-stack project that aims to showcase how specific green-related financing activities and workflows can be represented on the blockchain and managed throughout their entire lifecycle by financial institutions that are heavily involved in sustainability sector.

The project scope includes the issuance of tokens and the subsequent trading of the tokens, focusing on these key actions to provide a visualisation of how green financing activities can function on the STACS permissioned blockchain network.

4.

⬠ Lauretta.io

Lauretta.io is an internationally award-winning video analytics company trusted by both the largest property managers and the US military for mission-critical Artificial Intelligence.

Project: AI Software and Product Development
Facial Recognition is no longer state of the art and is banned in many places. Lauretta.io is in the process of building a system leveraging for person images in video through pattern of life analysis and full body image capture to identify shopper demographic and intentions using graph analytics, behaviour capture and reinforcement learning based demographic classification-based scoring. Our system generates more than 50 new data attributes that have not traditionally been part of real-time analytical platforms, leading to many challenges. As a Trainee, you will help build tools to support the development of analytical capabilities to process metadata extracted from CCTV video analytics of physical areas and a semi-supervised data tagging platform to train reinforcement learning paradigms.

5.

LIONSBOT

LionsBot International is a Singapore-based Robotics company that creates cleaning robots to serve commercial, industrial and public spaces. The founders bring their expertise in cleaning and Robotics; and transfer them to life in the form of highly versatile cleaning robots. Every piece of software and hardware is developed entirely by their engineers with pride. Their homegrown solutions offer you complete peace of mind as they know their robots' ins and outs thoroughly. They are guided by their vision to transform everyday living for over 50 million people with smart cleaning robots that people love.

Unlike other cleaning robots, LionsBot robots are designed to work in teams with each robot performing a specialised function. Each robot has a pioneering human-robot interface with no buttons or screens; rather control and communication is through the cloud scheduling, apps and the robot will send feedback through its vibrant personality.

LionsBot's core business is to design and manufacture cleaning robots. Its main customers are professional cleaning equipment distributors and dealers across the world. LionsBot's first product is LeoScrub, 1 out of the 16 robots from the Leobot family of floor cleaning robots. Its vision is to develop many specialised robots across many families tackling all buildings and environments, making cleaning robots beneficial to mankind!

Project 1: Live Dashboard Fleet Monitoring (Backend)
As a Trainee, you will be challenged to work closely with the software development team (Backend) to design and develop microservices, APIs, Web Socket, State Machine related changes to convert business requirements into technical features. You will be working on Live Dashboard Fleet Monitoring APIs and Microservices that allows user to access, monitor, remote command and configuration of our fleet of cleaning robots.

Project 2: Live Dashboard Fleet Monitoring (Frontend)
As a Trainee, you will be challenged to work closely with the software development team (Frontend) to plan, develop, implement, troubleshoot and maintain the software product and applications in LionsBot. You will be working on Live Dashboard Fleet Monitoring System that allows user to access, monitor, remote command and configuration of our fleet of cleaning robots. The expected output will be mobile apps or web application to manage and track our fleet of robots internationally.

6. p-e-n-c-i-l

Pencil generates compelling original copy, videos or layouts for any message and audience, pre-optimising for business metrics like recall, engagement and conversion. This is revolutionary for industries like advertising, publishing and e-commerce which depend on targeted content that's slow and expensive to make. AI content generation can be fully automated, using a brand's history and public data from news or social media to pitch products into any cultural context. Generation can also take its cues from human creatives, scaling concepts into whole new classes of personalised, real-time content. Pencil is an early-stage team from Google and award-winning creative shop Iris Worldwide, venture-backed by Surge (from Sequoia Capital), Wavemaker Partners, SGInnovate and Entrepreneur First.

Project 1: Backend Engineering
Pencil is looking to build and maintain sophisticated SaaS and mobile platforms that deploy their specialised AI and scale to thousands of users. As a Trainee, your job will be to own Pencil's platforms, with KPIs linked to feature rollout speed and user satisfaction. You will be working with the CEO/CTO to establish feature roadmaps based on vision and need, building out and managing generative AI mobile app (primarily focussed on backend), building out and managing our generative AI enterprise SaaS platform (primarily focussed on back end) and working with the AI team to test and implement new functionality.

Project 2: Frontend Engineering
Software today is deterministic. You push pixels or press keys one at a time. Pencil's AI platform writes languages, creates cutdown videos, generates visuals automatically and collaboratively. This means an extraordinary frontend. Hence, the Trainee's job will be to turn wireframes into working code, with KPIs linked to feature rollout speed and extensibility. Your tasks will be working with UX, backend and customer success teams to prioritise frontend features, build out and manage specific frontend interfaces on Pencil's platforms.

7. RESYNC

Resync is an AI-driven Energy Management Platform provider. They optimise renewable energy assets using real-time control and Machine Learning (ML). They do end-to-end value chain of energy optimisation, from monitoring and controlling the assets using IoT devices, to ML-based optimisation over a SaaS platform. Resync is building the virtual power plant for distributed energy resources and making the grid robust and sustainable.

Project 1: Frontend Development
As a Trainee, you will create a customisable user interface for our clients to interact with the platform's data. The platform will include drag and drop functionality of tiles and icons. The user can prioritise the data and the configuration will be saved in the backend. This will be developed as a use case and then integrated into the Resync's development environment with senior engineers' help.

Project 2: Backend Development

As a Trainee, you will build custom APIs and our automated test framework, including unit and integration testing. The task would be to create a form - like API where user details are updated and saved into the PostgreSQL DB.

8. **TVCONAL**

Television Content Analytics

TVConal specialises in developing AI-powered sports analytics solutions. They have best-in-class experts in Machine Learning (ML), computer vision, and big data analytics gathered in a team at the early starters of AI tools in sports. They leverage on the combined technologies of video capture with state-of-the-art hardware and advanced computer vision/AI methodologies. These will provide intelligent solutions in understanding sports by machines, modelling player's behaviour to recommend strategies, and real-time analysis in multiple professional sports worldwide. TVConal has been supporting broadcasters such as ESPN STAR SPORTS in fan engagement with new insights into the game and assisted cricket commentators with novel stats and great talking points throughout the game. They are looking to expand its current infrastructure to deliver what's important to every user and stakeholder in our market segment.

Project: Automated Video Analytics

As a Trainee, you will develop novel metrics based on advanced ML and computer vision models in different professional sports in this project. These metrics are customised according to the sports domain of interest. This project spans a wide range of analytics from match outcomes and player performance predictions to analysis of outliers and detection of anomalies as built-in widget catalogues to publishers for the live coverage of domestic and international leagues in different sports. In Tennis and Cricket, TVConal has been invited to deliver a novel solution for automatic collection of detailed data from videos in tennis for Decision Review Systems.