

## PARTNER COMPANIES ONBOARD RUN 2

1.



Aevice Health Pte Ltd is a Singapore-based MedTech spin-off from Nanyang Technological University at the forefront of addressing chronic respiratory disease, one of the generation's biggest healthcare challenges.

The company's non-invasive wearable devices enable the early detection of cardiopulmonary abnormalities remotely and in real-time, so that patients can receive fast and targeted care from the ease of their homes. Clinicians can also gain insights into their patients' health and track their responses to treatment plans easily from the Aevice analytical platform.

In Aevice Health, our mission is to drive medical innovations that transform healthcare, improve outcomes and empower lives.

### **Project: Frontend Development**

As a Trainee, you will develop responsive web and mobile applications that interfaces with our IoT devices. You will focus on improving app usability by creating custom layouts, app interactions, transitions and animations, as well as assist in integrating external APIs to connect the application to backend services. You will receive close guidance from senior engineers on developing and documenting Medical Device Software in accordance with regulatory standards.

2.



With a mission to help e-commerce brands influence millions in the fastest possible way. Affable is an easy-to-use, end-to-end influencer marketing platform. Affable's self-service platform helps brand streamline their influencer marketing campaign planning and execution, right from finding the most relevant influencers to measuring their impact. Currently, the platform tracks 5M+ influencers globally across various social media platforms - Instagram, Facebook, Youtube, TikTok & Twitter.

### **Project: Full Stack Development of Influencer Marketing Platform**

The Trainee shall work alongside a team responsible for:

1. Full stack software development to create sleek APIs, search engines and beautiful front-ends around our data
2. Software Architecture to acquire and process data from various sources at scale

3. Agile Software Development working closely with Senior engineers, designers and PMs to deliver features that delight.

3.  cloudsine

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. They also 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- Full Stack Cloud Development for Cyber Security Platform**

WebOrion is a platform built to detect visual web defacements and invisible script hackings such as card-skimming. Trainees will develop new features and enhance existing features, such as improving the dashboard, building new engines and other frontend/backend enhancements. Trainees will also be involved in deploying and optimising the cloud architecture for the platform, using services from AWS and other cloud providers.

4.  EnergyLite

Energy Lite is a virtual solar development platform that helps facility managers of smaller buildings to save 25% on electricity by installing and managing solar, for free. Our digital twin solution allows our clients to monitor their solar assets in real-time. Energy Lite operates both in Singapore and the Philippines.

**Project: Construction Worktool for Solar Developments**

As a Trainee, you can expect to work on a virtual Solar development platform. We envision a one-stop solar development cloud platform that incorporates data from IoT sensors and Inverter API and a construction progress platform for owners, investors and contractors to upload, keep track and view the status of a project.

5.



Evie.ai is a venture-backed enterprise (B2B) SaaS startup. We power smarter workplaces with Evie - the Intelligent Assistant for the Intelligent Enterprise. We enable people to partner with AI employees, amplifying human intelligence and creativity in order to deliver superhuman productivity, unprecedented operational efficiency and new business opportunities.

**Project 1: Scaleable Enterprise-grade Self-Service On-boarding**

As Evie matures, we would like to target mid-size enterprises with a more 'self-service' approach. The project aims to enhance our entire sign-up, onboarding and service configuration so that the product becomes more personalised and scalable, and more companies can take advantage of Evie's rich autonomous coordination capabilities. As a Trainee, you will work on developing the React-based web UI and collaborate with backend developers and designers to deliver functionality.

**Project 2: Evie Metaflow Platform Enhancements**

Evie is the first of many enterprise AI workers to transform how companies operate. Evie is built on our proprietary Metaflow engine, with 3 core components: natural language understanding, reasoning & workflow orchestration. Metaflow is complemented by multi-channel communications capability (SMS, Email, MS Teams, etc.) and an Integrations layer.

The goal of this project will be to deliver enhancements to Metaflow, the communications layer or the integrations layer depending on our feature roadmap at the time the project commences.

6.



FoodRazor eliminates this problem of messy paperwork for restaurants and makes it easy for them to track food costs and stay on top of their restaurant spending. We digitise their vendor invoices, provide detailed cost analytics and insights, and streamline their ordering system. We have several hundred customers in 10 markets, and are on a mission to keep growing our user base while finding ways to help our customers better and improve our product.

**Project: Software and Product Development Engineer**

As a Trainee, you will maintain and improve the current product offering: Ensure that the existing platform and its corresponding systems are well maintained and top form.

Work closely with the customer success and development team daily to investigate and squash any current and potential bugs. Look into improving current features to make it more user friendly for the customers.

**New product features:** Work closely with the management team to identify customer needs and help define the product vision to meet the business objectives. Includes understanding and conceptualisation of the new features and execution to fulfil the plans. Example projects could include improving our OCR system or developing an automated, data-driven inventory management system.

**QA/QC:** Assist in testing any new potential features or fixes to ensure that it is operational and there are no hidden bugs/ issues. Document processes, issues, and suggestions to help team members resolve and provide a smooth push to the actual platform.

## 7. **KINEXCS**

Kinexcs is an AI-driven digital therapy platform and wearables company enabling and empowering people for mobility and a better quality of life. It is focused on reducing the burden of musculoskeletal conditions, which affects about 25% of the global population. Their 1st product, KIMIA Knee Recovery Management Solution, is the world's 1st continuous monitoring device for the knee joint, originally launched in Q2 2021 and has booked initial revenues from large implant companies and hospitals, currently deployed in some of the largest public hospitals in Singapore. KIMIA is a proprietary sensing technology (based on >20 patents) that provides the world's first continuous joint range of motion monitoring capability. The product was the National Winner and International Top 20 of the prestigious James Dyson Award 2020 and has gained traction with major public hospitals, physiotherapy, and orthopedic clinics. This product has recently received approval as a Class A medical device in Singapore. The 2nd product of the company, KIMIA Home, is a digital therapist in the form of a mobile app capable of providing real-time exercise guidance and feedback using computer vision and AI and is currently being piloted with large corporate customers.

### **Project: Computer Vision in Web and Mobile Applications**

The project is to design, develop and maintain a software product that uses a single computer vision model to output real-time pose detection and analysis for various groups within the general public using their computer's webcam or mobile phone cameras. As a Trainee, you will be involved in the entire software development lifecycle from concept design to development to production and will work on designing finite state machines, APIs and microservices.

Due to the high complexity in computation, computer vision models have a narrow set of use cases for applications that require real-time output. The challenge is in optimising inputs and outputs of the model, the software architecture, how data is managed and many other components of the software product to improve the user experience of its end users. You will be part of the tightly-knitted product team working closely with the CEO and COO to realise the product vision.

8.



Heron Technology Pte Ltd (Heron) was formerly known as Nova Systems (Singapore) Pte Ltd. The company was founded in February 2017 as a wholly-owned subsidiary of the Australian defence & aerospace company Nova Aerospace Pty Ltd. In June 2021, the company was wholly bought out by its founding Managing Director, Ryan Lee Swee Ann, following the Nova Group's decision to divest its non-defence business in Asia. Heron's current business comprises Cybersecurity and digital aviation technology services.

**Project: AirBridge Development and POV Demonstration**

The Heron AirBridge aims to enable efficient and optimised use of airspace for AAM operations while ensuring safety and security, through an effective airspace management concept. AirBridge will be a fundamental piece to realise the true value of sustainable productivity and efficiency that could be brought about with AAM, as it enables pervasive but safe unmanned aircraft operations in the low-level airspace, and interfacing with various stakeholders. While the foundational technology blocks had been developed as part of the prototype UTM delivered under MOT/CAA funded project from 2018-2021, further work will be required to develop the various sub-systems and accompanying models, and to resolve operationalisation issues, will be required for commercialisation and POV demonstrations.

9.



i-Sprint Technologies Pte Ltd was established in the year 2021, a subsidiary company of i-Sprint Innovations Pte Ltd is a leading provider in Securing Identity and Transactions in the Cyber World that enables individuals, organisations, and societies to build trust and identity assurance for powering productivity gain through digital identity and identity of things (IDoT).

**Project: AccessReal-as-a-Service**

AccessReal Brand Protection Solution (Anti-Counterfeit, Product Identity, Track & Trace) currently targets large businesses with a minimum order of 50,000 unique IDs and upwards of 10K SGD for a starting trial. This is done physically through sales representatives and partners. This project is to develop a self-services sales and operational portal targeting small to medium size businesses, including local brands. It should complement the existing sales channel to expand total revenue, and at the same time, protect society from consuming counterfeit products through the company's solution.

Trainees should ideally have partial experiences or education in full-stack webapp development or mobile apps development. They can expect to touch on fullstack development to better understand their area of interest. When opportunity arises, they will get to specialise in one or more areas such as server side, client side, iOS/Android, user experience, cloud deployment and operations, testing, etc.

10.



Momentum Z is a Singapore Cybersecurity firm spun off from a Defense company in Singapore. Our vision is to provide an enterprise-grade solution to every company, with the vision to raise the level of cyber security and compliance in Singapore.

Our products and services include:

Red Teaming

VAPT (Vulnerability Assessment and Penetration Testing)

vCISO (or CISO advisory)

Cyber Threat Intelligence

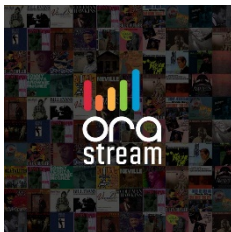
Data Protection Product (DPP)

Cyber Education

**Project: INTELNET**

The project comprises 40% application and 60% research, where Trainees can explore new areas by reading up different domains of the operation, coming up with hypotheses, and performing proof of concept. It is very suitable for those who wish to work in an unconventional cybersecurity lab. Trainees will be expected to perform assessments, not just VAPT but also on protocol-level security assessment. While Trainees need not have prior knowledge of the environment, they can expect to complete some work of an analyst, researcher, and taking on a white hackers role.

11.



OraStream Private Limited is a digital audio technology company founded in 2011 and is based in Singapore. The two founders of the Company are Frankie Tan and Kelvin Lee.

The Company's business focus is in network adaptive audio streaming solutions. The company targets at extending licensed music and video streaming services to lossless and high-resolution audio quality with an integrated and cost-effective streaming delivery solution.

The OraStream Service ("OraStream") is an end-to-end audio delivery platform for music services to offer full native resolution music in lossless quality on any network or player device. OraStream uses a scalable to full high-resolution audio coding method to marry the convenience of streaming with the best quality that users' player devices can handle. OraStream is operational and fully proven in high-fidelity music services, including primephonic, the Neil Young Archives, Presto Music and HDtracks.

**Project: Software Development & Implementation for Audio Content Marketplace for Independent Artists & Labels**

12.



**PHAOS TECHNOLOGY**  
BEYOND OPTICAL LIMITS

Phaos Technology Pte Ltd is an advanced optics technology startup based in Singapore. We strive to make nano-scopes at a fraction of the cost of expensive microscopes, using advanced technology.

The patented Optical Microsphere Nanoscopy (OMN technology) can resolve target features down to 137nm scale in visible light and ambient air observation, breaking the ~200nm Abbe's resolution Limit and bridging a major gap between optical and electron microscopy.

Our software team created the system that supports the microscope. Each feature is well-thought-out, intending to provide users with the utmost convenience and ease. Our team constantly adds new features and improves the user interface to make your job easier!

**Project: IOT Ready Microscope**

The Trainee can expect to work on the following:

1. Learning and Knowing our GUI programming with C# and C++. Assist in the GUI design and development.
2. Integrated IOT into our microscopy including distance control and operation of the microscope through Hand Phone and WWW.
3. Work on and setup Cybersecurity for the online microscopy system and all software systems developed by the company.

13.



Responsible Cyber Pte. Ltd. is a Singaporean company, and its corporate shareholders include Singtel Innov8 and NUS Enterprise. The company provides cybersecurity as a service, and it is building an amazing cyber platform IMMUNE.

**Project 1: React Back-End Developer**

We are looking for a JavaScript developer who is proficient with React.js. The primary focus of the selected candidate would be on developing our SaaS platform components implementing and executing them following well-known React.js workflows. Also, ensuring that these components and the overall application are robust and easy to manage. A commitment to collaborative problem solving, sophisticated design, and quality products are important.

**Project 2: Cybersecurity Product Management**

As a Cybersecurity product manager in our fast-growing development team, Trainees will get the opportunity to spearhead the development and to-market strategy of our flagship Security-as-a-Service & cyber risk management platform. Trainees will work closely with the engineering team to define, manage and execute a product vision.

14.

SGInnovate is a private-limited company wholly owned by the Singapore Government. We build and scale Deep Tech startups into high potential companies with global impact. We believe that hard global problems can be solved using Deep Tech, and Singapore, where we are based, is uniquely positioned to realise Deep Tech innovations that can tackle these challenges. Our efforts are prioritised around emerging technologies such as Advanced Manufacturing, AgriFoodTech, Artificial Intelligence, Autonomous Vehicles, MedTech and Quantum Computing, which represent impactful and scalable answers to global challenges.

**Project: Full Stack Engineer**

For a startup to grow and scale, hiring the right people is one of the keys to success. Looking for motivated individuals to help build the application tracking and talent intelligence system to support talent initiatives.

Trainees will experience the full software development life cycle – front-end design and development, integration of systems with external APIs, database management and cloud utilisation. Trainees will also be exposed to product management tasks, such as driving alignment with all stakeholders across the Talent Networking and marketing teams to ensure platform success. They will also work with cross-functional teams to understand business goals, provide user support, and recommend scalable approaches that support company's growth.

15.



SoundEye is a startup spun-off by a researcher from the Agency of Science, Technology, and Research (A\*STAR). SoundEye is a social enterprise that keeps innovating and challenging ourselves to use technology to help our society. Our solution can now be found in the airport, shopping mall, elderly nursing homes, orphanages, destitute homes, etc. We are currently expanding to Japan, Australia, China, and Thailand.

**Project: IoT Engineer - Firmware and AWS IoT**

16.



Speardome was established as a Singapore base Centre of Excellence (C.O.E.) by a world leader defence corporation, to focus on top-notch Cyber Artificial Intelligence R&D aligned with the Singapore national Cyber & Data Science strategic development. Speardome will focus on creating innovative solutions and local talent development.

**Project: Cybersecurity Monitoring Development**

The Trainee will have opportunities to design, develop and maintain a web application on both the frontend and backend.



For the frontend development, the Trainee will be involved in developing our user interface. He/she will be working intimately with the ReactJS web framework as well as with technologies such as (but not all-inclusive) GraphQL, NodeJS, Typescript, Material UI and Sync Fusion.

For the backend development, the Trainee will be involved in the backend data ingestion, normalisation and storage design and coding.

## 17.

### *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: Sustainable financing orchestration on the STACS blockchain**

Trainees will work on a full-stack project that aims to build and extend specific sustainable finance workflows according to the financial and sustainable industry's requirements within the STACS Vetta platform. This project will be related to the ESG Registry project that MAS and STACS have partnered together to build for the wider industry.

The project scope includes data collection, orchestration and the full digital lifecycle of sustainable projects within a private permissioned blockchain (STACS blockchain) using smart contracts built in Solidity.

## 18.

Stemly is a decision intelligence platform leveraging machine learning for supply chain and finance use cases in the areas of Forecasting and Optimisation. We work with large global enterprises to solve complex problems to achieve clear business outcomes by improving predictions and optimal allocation of resources. We have built software as a service platform and are currently focusing on demand planning, replenishment planning, inventory optimisation and production planning in the supply chain domain as well as cash flow forecasting in the areas of finance and focusing on FMCG, CPG, Retail and Distribution companies.

Stemly has raised US\$2.8M external funding from reputable investors such as ING Bank, EDB New Ventures, elev8.vc and other strategic investors.

#### **Project 1: Enhanced Replenishment Planning**

Replenishment planning is cited as the central problem in the area of supply chain management. It involves two important determinants: the lot sizing decision or the determination of the quantities to order, and the determination of replenishment dates (or

schedule). The objectives of the project are to identify what machine learning based approaches and leverage it to automate the process for inventory optimisation. Trainee should leverage the groundwork done by Stemly and augment it with novel approaches in the area of Reinforcement Learning, Deep Learning, Probabilistic networks.

### **Project 2: Automated Cash Flow Management**

Stemly has access to financial data coming from supply chain operations in the context of demand planning, inventory optimisation, and similar. The objectives of the project are to identify what are the most accurate and most generic data science approaches to predict the likelihood of an invoice to be paid on time and in full.

Trainees will have the exposure to participate in the design and creation of scalable software, writing clean, functional code on the front-end and back-end. Testing and fixing bugs or other coding issues. Trainees should leverage their past experience and training program organised by SGInnovate.

19.

Xnergy

Autonomous Power Technologies

Xnergy is a Venture and Sovereign-backed local Deep Tech startup incorporated in 2017, with headquarter in Singapore focusing on innovative charging technology for mobile robots. The company has strong industrial experience founding members and is active in Asia and Europe for pilots with several Fortune 500 companies. Xnergy has successfully created the smallest high power universal contactless charger in the market.

Xnergy has successfully obtained TUV SUD CE certification in Q3 2020, and it marked the beginning of its products, qualifying for a great leap in revenue-generating competency, a key milestone achieved from prior phase where revenue was only generated from pilots. The company has reached out to customers in multiple markets such as China, Taiwan, Australia, Malaysia, Thailand, Europe and gradually secured orders from customers in different application fields. Today, Xnergy has reached out to over 200 customers on a global basis. Due to the business expansion, the company has an office in Suzhou, China and Boston, USA.

### **Project: Cloud Platform for Smart Charger and Battery Management**

Xnergy wireless charger plays an essential role in the robot ecosystem, and it fills the last gap of fully automobile capability for robots. Xnergy charger comes with a smart module giving it the power of remote control, monitoring and remote diagnosis, and the cloud platform is the key to implementing all the features for it.

The cloud platform separates the backend and frontend such that the backend provides an API, and the frontend is interactive with users. Users can monitor and control the charger remotely based on the platform. The API is also provided to the customers for integration.

## 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 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 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.