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Affable

Affable is building AI solutions to scale word of mouth marketing through micro influencers. It is an end-to-end platform to discover, manage and measure authentic micro-influencers on Instagram. Within 7 months of inception, Affable has built and launched their product, onboarded recurring paying customers and closed their seed round through strategic VCs and strategic angels, including executives at Google.

Org Name	**Affable**
Project Name	Machine Learning Models for Fake-Account Detection (1)
Project Category	- Artificial Intelligence - Data Science
Duration	6 months
Tech Skills	Python
Project Description	Fake accounts on social media being purchased by users to increase their following. This in turn decreases the engagement that their content receives, and it is a risk for brands that work with such influencers. Affable is building machine learning models around detection of such fake-accounts. They analyse all the followers (public accounts) of influencers who have thousands of followers, to detect how many of them are real or fake. This includes automatically analysing the text in their biography, content in their images, learning and improving the criteria that define a real user and continuously improve the accuracy of such detection. **Roles and Responsibilities:** The apprentice will work on developing and improving the accuracy of the machine learning model that detects fake accounts by including NLP on Instagram Biographies and Computer Vision on Instagram images. This project will involve using core Machine Learning models to detect Entities from unstructured text and create classification models to disambiguate multi-intent documents and Entities. The project will be led by the CTO and the apprentice will get a chance to not only develop the model but also integrate the model with the customer-facing-application. **Requirement(s):** The apprentice should know Python.

Org Name	**Affable**
Project Name	Machine Learning Models for Interest Detection from Images (2)
Project Category	- Artificial Intelligence - Data Science
Duration	6 months
Tech Skills	Javascript, Python
Project Description	The apprentice will be working on one of the highest priority projects in Affable's pipeline – to develop machine learning models to detect interest from images. Affable has a dataset of millions of images, but existing image-recognition APIs only provide generic labels (eg. clothes) and fails to identify context (eg. fashionable). **Roles and Responsibilities:** The work involves the use of cutting edge technologies including computer vision, machine learning and data engineering.This would be included as part of the Affable influencer recommendation engine that finds social media influencers that have uploaded images about a particular interest. The apprentice would work directly with the CTO spearheading the project and play an important role in the development of Affable. They will be working directly with the founders in a very fast-paced environment, constantly learning and being a part of a rapidly growing startup. **Requirement(s):** Programming knowledge of Javascript and Python is preferable.

Almond.ai

Almond.ai is a startup developing a new platform for personalised AI that lets users own their data and the AI model as well. Their proven technology can quickly train personalised AI models in a cloud cluster infrastructure. Furthermore, the owners of the data can choose to deploy their AI on Almond.ai's platform or to download it in the open ONNX format. They will also be releasing a platform for personalised voice assistants later this year.

Org Name	**Almond.ai**
Project Name	Generation of Natural Dialog using AI (1)
Project Category	Artificial Intelligence
Duration	3 months
Tech Skills	Python, JavaScript, HTML, CSS
Project Description	Almond.ai provides a complete solution for voice assistants including ASR, dialog generation and Text-to-Speech in custom voices. Most commercially available dialog APIs are constrained in terms of the range of prose that can be generated. The apprentice will work with the team to extend and augment these dialog generation services with novel AI algorithms.

Roles and Responsibilities:

Almond.ai is looking for a master's student or advanced undergraduate with a research and coursework background in Computer Science, Natural Language Processing, and Machine Learning. Almond.ai's platform offers a front-end for creating Voice Assistants, using an Intent-driven Dialog interface. The apprentice will work with internal team to prototype new interfaces for dialog generation that will focus on
1) automating creation of scripts/intents
2) flexible and expressive UI for designing dialog

The apprentice will also identify other forms of dialog systems that are discussed in literature or available in the market, and help the team assess the viability of implementing new features on their platform.

The apprentice will study and summarize the state of the art AI Dialog systems that are currently available. They will define, create and test an innovative user experience for Dialog agents around the Almond.ai platform. By the end of the apprenticeship, they will collaborate with the engineers to produce a demo-able prototype based on their research work.

Requirement(s):
The apprentice should have a background in Software Engineering and User Interface Design, and be proficient in Python, JavaScript, HTML, CSS.

Org Name	**Almond.ai**
Project Name	AI Synthesis of Chinese Speech (2)
Project Category	Artificial Intelligence
Duration	4 months
Tech Skills	NLP, statistics, Tensorflow
Project Description	Almond.ai is testing AI algorithms which can train a voice robot to model the speech of any individual. However, the algorithm needs to be adapted for different families of languages. Almond.ai has an urgent need to demonstrate the capability for Chinese (Mandarin) speech. The apprentice will need to be fluent in Mandarin, and possess a background in NLP, statistics or Machine Learning.

Roles and Responsibilities:

Almond.ai is looking for a master's student or advanced undergraduate with research and coursework in Computer Science, Natural Language Processing, and Machine Learning. The apprentice will be working with Almond.ai platform for voice synthesis, specifically implementation of the DeepVoice3 TTS engine. Currently the TTS engine supports generation of English speech only.

As part of the apprenticeship at Almond, the apprentice will become familiar with the deep learning models for Sequence-to-Sequence modelling and for Audio synthesis. They will also gain in-depth experience with a state of the art Data-Driven TTS pipeline that can be trained to reproduce an individual's voice. As part of the internship, they will also produce a technical report on the recent literature regarding NLP in Chinese Language for speech synthesis.

The apprentice will work with the engineering team to identify the issues in Chinese (Mandarin) speech generation, regarding Chinese Language Datasets, the parsing/tokenization of Chinese Language, modelling of speech, and the variances between regions/dialects.

Requirement(s):

The apprentice should be proficient in Python, Tensorflow and/or high-level machine learning libraries. It would be also beneficial for the apprentice to have a background in audio and signal processing.

Dathena

Dathena is a Singaporean company developing data governance software leveraging artificial intelligence technologies.

Thanks to revolutionary machine learning and deep learning methodology, Dathena reaches unprecedented levels of accuracy combined with advanced analytics. Pushed by data regulation changes, Dathena experienced steep growth and already secured large contracts with leading organisations spanning MNCs and Financial Institutions.

Gartner predicts that enterprise data will grow by 800% in the next few years. Dathena is the only solution to easily classify and manage data with this level of accuracy while helping their clients comply with regulations.

Org Name	**Dathena**
Project Name	Graph Visualization of Personally Identifiable Information (1)
Project Category	- Artificial Intelligence - Data Science
Duration	3 months, extendable to 6 months
Tech Skills	Scala, Spark, Python
Project Description	Visualisation techniques appears to be the most efficient solution to address the growth in data collected. In line with regulations, corporates need to locate Personally Identifiable Information (PII) with ease. By executing queries in Dathena tools, user can quickly get an overview of the PIIs on some specific individual(s) using advanced visualisation techniques. Such tools not only identify and aggregate data but also provide direct access to the location(s) of the related document / documents. One of the challenges is to populate the graph database as it is composed of millions of nodes and edges representing the documents, the persons and the PIIs. **Roles and Responsibilities:** The apprentice will work on optimising the graph creation time and its stability by using multithreading techniques or using Spark, instead of the current sequential insertion. Moreover, several node and edge properties can be added which implies complex aggregation on the available data. The apprentice will work in close collaboration with the mentor as well as with the research and development team. The apprentice will be responsible for the delivery and follow-up of the project with active and regular support from mentor (weekly meetings, etc.). Implementation will be tested on real data set as well as fuelled by customer specific requests. Key learnings of the apprentice will be related to Deep Learning, production coding skills while being confronted to customers'requirements. **Requirement(s):** Scala programming language is required for this project as well as good software engineering best practices. It would be good to have some knowledge of Apache Spark.

Org Name	**Dathena**
Project Name	Development of GDPR Chatbot Leveraging Deep Learning and Knowledge-Based Modelling (2)
Project Category	- Artificial Intelligence - Data Science
Duration	3 months, extendable to 6 months
Tech Skills	Scala, Spark, Python
# Apprentices	1
Project Description	The Chatbot project intends to develop a vDPO - virtual Data Protection Officer. The chatbot should answer any queries related to regulations in a human like conversation. Queries should encompass regulations (GDPR, PDPA, etc.) as well as internal policies. Deep Learning will be leveraged for this project with some knowledge-based models for specific use-cases. While Watson GDPR stands as the main solution trying to solve this challenge it has been proven not being working properly. **Roles and Responsibilities:** The apprentice will work with the supervisor directly on the research plan creating main steps defining challenges and monitor progress achieved. There will be weekly follow-up meetings to discuss the progress, and a detailed plan will be created for the next week. The apprentice will work on the scientific part while gaining knowledge on business requirements by working on real data and collaborate with the development team. Key learnings of the apprentice will be related to Deep Learning, production code skills developing and business vision creating. **Requirement(s):** Scala programming language is required for this project as well as good software engineering best practices. It would be good to have some knowledge of Apache Spark. Python could be used for the research part as well.

Org Name	**Dathena**
Project Name	Development of a Graph-based Method for Personal Identification Data Linking (3)
Project Category	- Artificial Intelligence - Data Science
Duration	3 months, extendable to 6 months
Tech Skills	Scala, Spark, Python
Project Description	Respect of privacy and data management has been under scrutiny of regulation authorities – Enforcement of PDPA in Singapore (2014), Honk Kong PCPD and more recently European's General Data Protection Regulation (GDPR) May 2018 – commonly addressing the protection of individuals rights. Beyond being a regulatory impediment, Data Management stands as a key concern for any businesses. Dathena has developed a dedicated tool to help corporates to better understand their data as well as ease their compliance requirements. Key challenges encountered include maintaining personal data processing records, complying with individuals rights regarding personal data collected, performing Data Privacy Impact Assessment, and to detect & Mitigate Security Breach. The highest priority for the data protection solution is to provide efficient tools for sensitive data extraction, detection, andorganisation. The challenge to be addressed is to link individuals and personally identifiable information (PII) like name, address, email, card number, etc. The team aims to leverage Graph-based methods to find the most weighted pairs of PIIs linked to the person. Unstructured text data is used in this task for information retrieval and matching. The main idea of the approach is to evaluate three degree-based measures to find the most suitable PII node for the target name mention. Experimental results on domain-dependent data sets show that the graph-based method provides significant improvement with the state-of-the-art methods. As of today, none of exiting GDPR tools achieves satisfactory personal data linking. Most relevant tool identified, GlobalInferencer, solely offer linking personal social content sourced from the web. **Roles and Responsibilities:** An apprentice will directly work with the supervisor to set up the research plan, define key milestones and monitor progression. Weekly follow-up meetings will be organised to review and discuss progress as well as define top priorities (short term, midterm and long term). The apprentice will benefit from being exposed to the business side of things, while still focusing on the scientific side as well. He/she will work with real data and collaborate with the development team. The apprentice will develop his / her knowledge and competence in Graphtheory and coding in a stimulating and fast-moving environment.

Requirement(s):

Scala programming language is required for this project. Apache Spark knowledge will make additional points. Python could be used for the research part as well. Key Learnings of the apprentice will be related to Graph theory, production code skills developing and business vision creating.

Latize

Latize is a Singapore based AI software company, providing a revolutionary new approach to understanding and leveraging data – out of the box! One of the earliest global adopters of Semantic Technology, Latize Ulysses software enables enterprises to structure and synergize enterprise data and external open data by connecting the dots across information systems, databases and a variety of data sources. Ulysses' semantic segmentation and Machine Learning engines deliver insights directly into a transactional system or to the desktop. In recognition of its innovative approach to data management and analysis, the Latize Ulysses was accredited by the Infocomm Media Development Authority of Singapore (IMDA).

Org Name	**Latize**
Project Name	Deep Learning Component Enhancement
Project Category	- Artificial Intelligence - Data Science
Duration	6 months
Priority	High
Tech Skills	Java (EE)
# Apprentices	2
Academic Level Required	Degree
Project Description	This module will be a part of Latize's core product offering in the upcoming version release. It will be used to improve accuracy of their cross-sell recommendations and fraud detection solutions. The apprentice will be software engineer to refine their current ensemble set-up of Machine Learning components and graph analytics algorithms. He/she will get to solve interesting and challenging problems alongside a great team of engineers and have a deeper appreciation on how to implement "AI" technologies to solve real-world challenges in a sustainable fashion. **Roles and Responsibilities:** Participate in the development and implementation of high quality, innovative and sustainable software over the full life cycle of Linking Enterprise Data: from extraction, storage/querying, authoring, interlinking/fusing, classification/enrichment, quality analysis, evolution/repair to exploration/search/analytics • Integrate all elements (including UIs, APIs, ontology, and semantic database • In addition, analysis of user requirements, design, development, test, documentation of existing tools, software libraries, develop general user documentation, UI testing and integration of software solutions are required **Requirement(s):** Apprentice with exposure to Machine Learning or Big Data technologies or Graph analytics will be advantageous. Java (EE) preferred.

Portcast

Portcast makes shipping profitable, with accurate cargo predictions. They use proprietary machine learning algorithms and real-time external market data (economic indices, marine weather and satellite-based data) to predict how much cargo will be shipped, from where and when will it arrive.

Org Name	**Portcast**
Project Name	Insights from Maritime Data for Finance Stakeholders
Project Category	- Artificial Intelligence - Data Science
Duration	6 months
Tech Skills	Python, SciPy Stack, Keras
Project Description	90% of the world trade travels via maritime, at least once in its lifetime. Portcast wants to apply machine learning to the extensive data-sets from maritime industry that it can capture and convert it into actionable alpha intelligence. The project scope is to transform the raw data-sets that Portcast captures into 3 data-sets related to ports, vessels and inland logistics. This will not just be interesting for the logistics industry, but beyond that to finance, trading, insurance, etc.

Roles and Responsibilities:

In this role, the candidate will be responsible for analysing time series data as well as the news crawling / sentiment analysis engine. He/she will be required to be an end-to-end data scientist. The role includes understanding business needs, developing a proof-of-concept, data collection, and productionizing their data product.

Requirement(s):

- Understand the data requirements and provide relevant data visualisations, analysis, and insights
- Be able to spot patterns and trends in data and propose solutions to respond to such trends and insights
- Demonstrated ability and aptitude to learn new things and contribute ideas

  - Experience in fields of computer science, engineering, science, mathematics, statistics, psychology, economics and linguistics are desirable

  - Demonstrated records of doing programmatic data analytics with Python

  - Experience with experimenting on different modelling techniques (supervised and unsupervised learning) and develop data visualisation for data stories
- Experience with the SciPy Stack and Keras is a plus
- Experience building web applications and cloud services is a plus
- Experience building distributed systems is a plus

See-Mode

See-Mode Technologies is a fast-growing medtech startup backed by Entrepreneur First and SGInnovate. At See-Mode, the team works on innovative solutions for stroke prediction based on medical image analysis, artificial intelligence, and blood flow simulations. They have an interdisciplinary team of scientists and engineers to bring state-of-the-art research into routine clinical practice.

They have also just closed a strong seed round from top tech VCs and investors in Asia-Pacific and are quickly expanding their team. Grab the unique opportunity to work with experts in healthcare, artificial intelligence, and computational fluid dynamics!

Org Name	**See-Mode**
Project Name	Medical Image Analysis (1)
Project Category	- Artificial Intelligence - MedTech / HealthTech / BioTech - Data Science
Duration	6 months
Tech Skills	Python, C++
Project Description	See-Mode's software is built on top of computer vision, machine learning, and computational fluid dynamics. The platform will be used by clinicians (radiologists, neurologists, and cardiologists) in hospitals to help them predict stroke. **Roles and Responsibilities:** The apprentice will work on a multimodal image analysis platform to analyse medical images. The backend algorithms are designed and developed in-house by the amazing engineers in See-Mode. Working closely with the founders (who have PhDs in Electrical Engineering and Physics) and the core engineering team, the apprentice can learn a lot of technical and soft skills (especially about the journey of starting a startup and realizing an idea). **Requirement(s):** Having experience in computer vision, machine learning, medical image analysis, and programming (especially Python and C++) is a strong bonus.

Org Name	**See-Mode**
Project Name	Blood Flow Modelling (2)
Project Category	- Artificial Intelligence - MedTech / HealthTech / BioTech - Data Science
Duration	6 months
Tech Skills	Computational fluid dynamics, cardiovascular fluid dynamics, OpenFoam, VTK, and Python

Project Description

Roles and Responsibilities:

See-Mode is looking for a CFD (computational fluid dynamics) engineer to join this fast-paced startup and help them in developing an interdisciplinary medical software. The work involves single-phase flow simulations, mainly using OpenFoam. Implementing lumped models for boundary conditions and speeding up the simulations by parallelization are the main responsibilities. The developed software will be used by clinical researchers and clinicians globally.

Working closely with the founders (who have PhDs in Electrical Engineering and Physics) and the core engineering team, the apprentice can learn a lot of technical and soft skills (especially about the journey of starting a startup and realizing an idea).

Requirement(s):
Having experience in computational fluid dynamics, cardiovascular fluid dynamics, OpenFoam, VTK, and Python is a bonus.

Taiger

Taiger is an international software vendor headquartered in Singapore that is leading the next generation of Artificial Intelligence solutions in the fields of information access and retrieval for the finance, insurance and government sectors.

Org Name	**Taiger**
Project Name	Automatic Knowledge Acquisition – Information Extraction (1)
Project Category	Artificial Intelligence
Duration	6 months
Tech Skills	Java, Python, Scala
Project Description	Automatic classification of document images is an effective initial step of various Document Image Processing (DIP) tasks such as document retrieval, information extraction and text recognition, among others.

Roles and Responsibilities:

Combining State-of-the-art Image processing techniques to build classification models would be the core of the project. The developed system/framework will be compared against human experts and state of the art researches. Taiger aims to achieve 80% improvement in efficiency and accuracy separately, it will be the projects' success factor. This project utilises cutting edge technologies such as Machine Learning, Natural Language Processing, Deep Learning and Computer Vision.

Requirement(s):

- Computer science background in education
- Hands-on experience with at-least one of the programming languages: Python / Java
- Good theoretical / conceptual knowledge of at-least one of the following fields:
    - NLP
    - Machine Learning
    - Artificial Intelligence
    - Deep Learning
- Ability to work in a fast-paced environment
- Willingness to learn new technologies and applying them to solve real world problems

Org Name	**Taiger**
Project Name	State-of-the-Art Intelligent Character Recognition Framework (2)
Project Category	Artificial Intelligence
Duration	6 months
Tech Skills	Java, Python, Scala
Project Description	

Roles and Responsibilities:

The apprentice will help to create a state-of-the-art Intelligent Character Recognition (ICR, to detect non-digital characters from the images) framework by using Deep Learning methodologies such as Convolutional neural networks (CNNs), Bi-directional Long Short-Term Memory Units etc. The developed system/framework will be compared against human experts and state of the art researches.

Taiger aims to achieve 80% improvement in efficiency and accuracy separately, it will be the projects' success factor. This project utilises cutting edge technologies such as Machine Learning, Natural Language Processing, Deep Learning and Computer Vision.

Requirement(s):

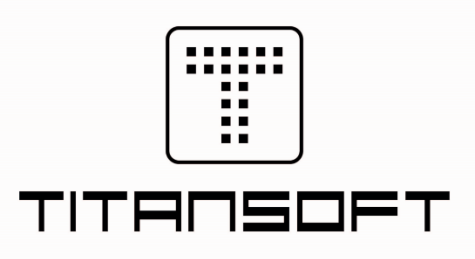
- Computer Science background in education
- Hands-on Experience with at-least one of the programming languages: Python / Java
- Good theoretical / conceptual knowledge of at-least one of the following fields:
    - NLP
    - Machine Learning
    - Artificial Intelligence
    - Deep Learning
- Ability to work in a fast-paced environment
- Willingness to learn new technologies and applying them to solve real world problems

Terra Weather

Terra Weather is a Singapore-based technology company specialised in predictive modelling and AI. Their first weather AI, TerraWaves, has successfully predicted weather at much higher accuracy than human, ensuring safety and timeliness of 500+ mission critical offshore operations for companies like BP, Chevron, and ENI worldwide.

Terra Weather is currently developing tools to simplify AI development for non-programmers, with potential customers coming from local universities and hedge funds. They work closely with Singapore Institutes of Higher Learning to accelerate R&D development using AI techniques.

Org Name	**Terra Weather**
Project Name	Artificial Intelligence Lab
Project Category	- Artificial Intelligence - Data Science
Duration	6 months
Tech Skills	C++
Project Description	TerraAI (http://terra-ai.sg/), an AI division of Terra Weather is developing Artificial Intelligence (AI) Lab to dramatically simplify and automate AI development for non-programmers. AI Lab is designed to significantly lower technical barrier for end-to-end AI development from data extraction & transformation, model development and diagnostics, to deployment. AI Lab can also be seamlessly integrated with 3rd party services (e.g. visualization, cloud computing, data providers, etc) through simple glue language called Mini. The early version of one of the AI Lab modules, Autocaffe, was used by over 120 students during IoT Datathon 2.0 [http://science.nus.edu.sg/datathon/]). **Roles and Responsibilities**: • Help develop core services and extension of the AI Lab • Validate and test AI development tools against existing machine learning frameworks and Terra Weather in-house AI models • Deploy AI solutions to clients **Requirement(s):** • programming in C++ • has a background in machine learning is preferred • experience with GPU is a plus



Titansoft

Titansoft's journey began in 2005 as a software development firm in Singapore, fuelled by passionate people who believe in amplifying value through technology. They are involved in the iterative product development lifecycle with their customers, from strategy till deployment. Moving to Agile development has encouraged sustainable development and flexible delivery of quality products for their customers.

Org Name	**Titansoft**
Project Name	Machine Learning with Football Data
Project Category	- Artificial Intelligence - Data Science
Duration	6 months
Tech Skills	R, Python
Project Description	Titansoft has a large history of raw data on football and would like to profile the football leagues, with a target focus on medium and small leagues. There is a need to analyse the differences between the football leagues and plan to build an automation system updating results from statistics analysis or machine learning. One research analyst apprentice would be required to do EDA (exploratory data analysis), statistics analysis and machine learning analysis.

Roles and Responsibilities:

- Cleaning huge raw datasets and transforming them into analytic data
- Analysing the data and finding valuable insights based on the project goals
- Using machine learning methods in data analysis
- Ideally the final results should be automatically updated in the future

Requirement(s):

- Understand football and its relative domain knowledge (eg. Leagues, teams, players etc.)
- Able to crawl data from website if needed
- Preferably know programming in R or Python

ViSENZE™

Simplifying the Visual Web

Visenze

ViSenze powers visual commerce at scale for retailers and publishers. They deliver intelligent image recognition solutions that shorten the path to action as consumers search and discover on the visual web.

Org Name	**Visenze**
Project Name	Deep Learning Model Training and Development for Image Recognition (1)
Project Category	- Artificial Intelligence
Duration	6 months
Tech Skills	Python, caffe,MXNet, TensorFlow
Project Description	There are many types of neural network structures and different network structures work differently for different image recognition tasks.

Roles and Responsibilities:

The apprentice will work with Visenze's algorithm expert to implement, improve state-of-art research and design new network structures to solve their short-term or long-term research problem, such as object detection, image classification, feature learning and compression.

The apprentice will be involved in:

- In-depth knowledge of tuning CNN models
- Design principles of AI systems
- Software engineering principles
- Planning, time management and problem-solving skills
- Working effectively in a diverse team

Requirement(s):

- Passionate about machine learning and data science
- Solid data structure and algorithm fundamentals
- Solid data analytics skill
- Experience working with GPU clusters and Deep Learning frameworks such as TensorFlow, PyTorch and Caffe is a big plus
- Good communication skills and strong motivation to learn

Org Name	**Visenze**
Project Name	Deep Learning Platform and Infrastructure Development (2)
Project Category	- Artificial Intelligence
Duration	6 months
Tech Skills	Python, GoLang, Java, Javascript, React, AngularJS
Project Description	Deep learning infrastructure is more than just implementing an open source deep learning framework. Training data management, model management, evaluation systems and development of other tools must also be taken into account.

Roles and Responsibilities:

The development goal of such platform and systems is to facilitate faster development cycles from AI algorithm to product and to make it easier for engineers who are not hard-core algorithm experts to bring the deep learning model online.

The interview process will involve understanding the potential apprentice's area of interest and competencies. If selected, the apprentice will be paired with an experienced Mentor to help him/her develop his area of interest.

Visenze has a formal and structured on-boarding programme which will ensure that the apprentice develops a strong understanding of the company, project scope and quickly establishes an internal network of resource persons to help him/her in the project. The mentor will guide the apprentice through this on-boarding process.

Throughout the period of apprenticeship, there will be weekly review meetings with the mentor to ensure that the apprentice is progressing well and acquiring the necessary know-how and skills to complete the project. The mentor will also involve the apprentice in day-to-day discussions and scrums to ensure that the apprentice is well integrated into the team and has a good overview of the impact of the project he/she is working on. The apprentice will also have to work other teams to develop his/her understanding of a broader area of technology, such as distributed infrastructure and big data stack.

As the development of soft-skills such as communication, interpersonal and teamworking skills are important too, the mentor will ensure that the apprentice participates in team-based activities and has opportunities to interact with other team members outside his/her own immediate project, so that he/she can develop these skills holistically. In addition, the mentor will ensure that the apprentice feels a sense of belonging and integration during his/her time with ViSenze, through community events and social activities.

There will be a formal review at the end of one month, where the apprentice can share his/her experience in the first month and highlight any challenges or difficulties he/she is facing to HR and the mentor. At the end of the internship, the apprentice will be required to present his/her project and experience with a panel comprising the CTO, the mentor and HR.

The apprentice will be involved in:

- Development process of AI technology
- Design principles and management of AI systems development
- Micro-service based software engineering principles and practices
- Planning, time management and problem-solving skills
- Working effectively in a diverse team

Requirement(s):

- Passionate about machine learning and data science
- Solid web service development for frontend and backend
- Solid data structure and algorithm fundamentals
- Solid data analytics skill
- Experience working with GPU clusters and Deep Learning frameworks such as TensorFlow, PyTorch and Caffe is a big plus
- Good communication skills and strong motivation to learn

Org Name	**Visenze**
Project Name	Deep Learning Inference Engine Development (3)
Project Category	- Artificial Intelligence
Duration	6 months
Tech Skills	C++, Golang, CUDA, Caffe, MXNet, Tensorflow
Project Description	After the deep learning model is trained, model inference is very important to bring the value to products. To achieve this, there is a need to understand performance bottlenecks of different types of CNN network structures, hardware constraints in achieving the maximum utilization of computing resources and at the same time, satisfy different computing scenarios.

Roles and Responsibilities:

This project cuts across multiple engineering disciplines including deep learning, distributed systems and system optimization.

The interview process will involve understanding the potential Apprentice's area of interest and competencies. If selected, the apprentice will be paired with an experienced mentor to help him/her develop his area of interest.

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The apprentice will be involved in:

- Design principles and practices for low latency distributed system
- Design principles and practices of deep learning inference service
- Planning, time management and problem-solving skills
- Working effectively in a diverse team

Requirement(s):

- Passionate about machine learning and distributed systems
- Solid data structure and algorithm fundamentals
- Experience working with GPU clusters and Deep Learning frameworks such as TensorFlow, PyTorch and Caffe is a big plus
- Good communication skills and strong motivation to learn