

CORPORATE | AI Internship for **GURUKUL** Young Achievers



Grades 8 - 12

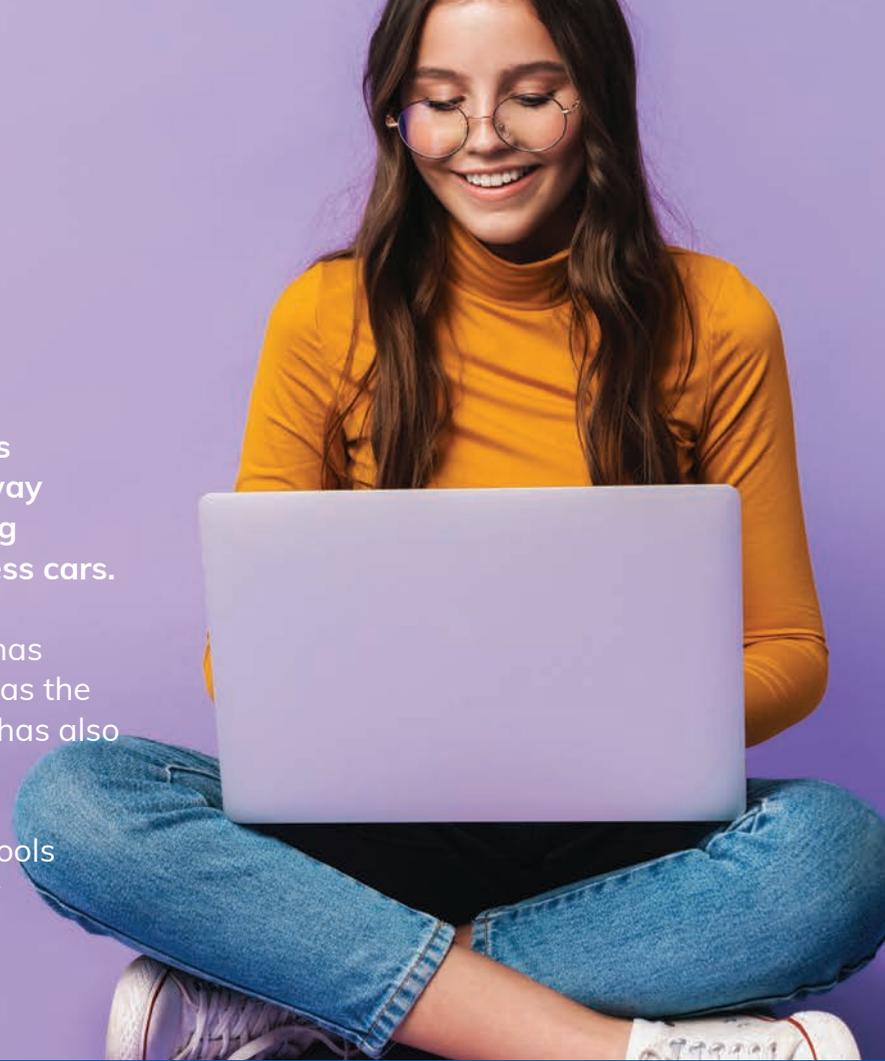


WHY ARTIFICIAL INTELLIGENCE (AI) FOR SCHOOLS?

There are innumerable ways in which AI is changing our lives – from improving the way medical science treats diseases to creating stronger and smarter buildings to driverless cars.

Having knowledge in artificial intelligence has become almost imperative in current times as the technology has become all-pervasive, and has also transformed organizations across sectors.

Driven by the demands of the industry, schools across the globe are preparing an AI-ready generation.



Indian board, CBSE, has introduced artificial intelligence as a subject in schools starting Grade 8.

The initiative has been undertaken in schools affiliated with Central Board of Secondary Education (CBSE) in order to enhance the multidisciplinary approach in teaching-learning and to sensitize the new generation.

Students from IB and Cambridge boards are already doing projects on AI to solve real world problems. AI can be applied now across any stream - arts, science, medicine and healthcare, sports, design, etc. Hence the need to start early in school.

National Education Policy of India (NEP 2020), also recommends the need to inculcate new-age technologies such as AI and data analytics, which are built on the premise of logical thinking, critical thinking and problem-solving skills.

CORPORATE GURUKUL'S AI INTERNSHIP FOR YOUNG ACHIEVERS IS ALIGNED WITH THE NEEDS OF A CHANGING WORLD AND NEW-AGE LEARNERS.

WHAT IS AIYA?

The AI Internship for Young Achievers (AIYA) is a 8-week long live online hands-on internship designed for high school students in grades 8 through 12.

It is an open academic Internship with participants from multiple countries across asia.

It will enable you to discover how you can use the power of ai in any discipline and field of study and how machine learning and artificial intelligence can make peoples' lives better. Through our hands-on sessions you will put your new skills to practice.



KEY SKILLS YOU AQUIRE

Solve Real World problems and create impact by developing application using Machine Learning and AI

Develop a systematic and analytical approach to thinking and problem solving.

Enhance problem-solving mindset. You will acquire the foresight to conceptualize how solutions can increase efficiency, cost-effectiveness and add competitive advantage.

Become expert communicator and team player who can translate and simplify technical aspects

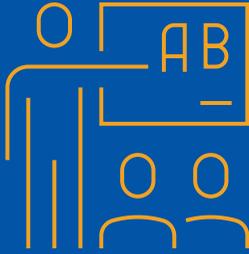
Strengthen coding skills and learn programming languages such as python which is the most recommended and widely used language.



CURRICULUM

Learn the tools to create an impact on the world.

01



Classroom Sessions

- a. Introduction to AI

- b. AI vs Machine Learning vs Deep Learning

- c. Importance of Data & Business
Understanding for Analysis

- d. Introduction to Python

- e. Machine Learning (ML) Algorithms

- f. Deep Learning (DL) Algorithms

02



Hands-on Sessions

- a. Botany: Identifying Flower Species using ML

- b. Data Science: TensorFlow Playground

- c. Arts: Handwritten Digit Classification with DL and CNN

- d. Media & Entertainment: Sentiment Analysis on IMDb Movie Reviews

- e. Medicine: X-ray Image Classification

- f. Finance & Economics: Stock Market Prediction

03



University Admission Guidance

- a. Identify Career Interests

- b. What do Universities Look for in a Student?

- c. Building a Strong Profile for Target Universities

- d. Financial Aid and Scholarships

PARTNER PROFILE



The National University of Singapore (NUS) is the first autonomous research university in Singapore. NUS is a comprehensive research university, offering a wide range of disciplines. The QS World University Rankings 2019 ranked NUS 11th in the world and 1st in Asia. The Times Higher Education World University Rankings 2018 placed NUS at 22nd in the world and 1st in Asia-Pacific, while its 2018 reputation rankings placed it at 24th globally. In 2019, it ranked 27th among the universities around the world by SCImago Institutions Rankings.

The NUS School of Computing, established in 1975 is one of the leading computing schools in the world, with faculty members who are both internationally recognised researchers and inspiring teachers.

IT offers outstanding programmes across the full spectrum of the field of computing, including Computer Science, Information Systems, Computer Engineering, Business Analytics and Information Security, as well as specialisations in emerging areas of importance such as Artificial intelligence, Internet of Things, Fintech, Blockchain, Analytics and Security.



Hewlett Packard Enterprise

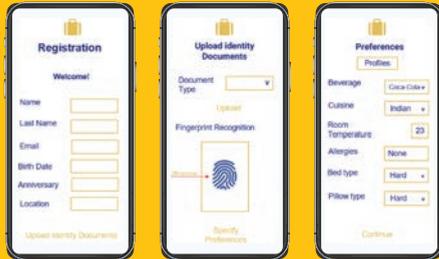
Change the world. At Hewlett Packard Enterprise Education, that's not just an empty catchphrase. They believe in not just looking toward the future, but creating it – with groundbreaking new technologies, products, and services that change how businesses and individuals work and live.

HPE encourages real work that makes an impact, supported by the resources of a Fortune 50 company that collaborates with leading academics and research institutes worldwide. Participants apply insights, creativity, and problem-solving skills to a specific research question, examining and refining the topic to help discover new insights and solutions.

The advanced research from Hewlett Packard Enterprise Education changes the world. They work hand-in-hand with students, bringing innovation roadmaps, integrating key technologies into existing solutions, and ensuring not only that we're more agile and nimble in today's competitive marketplace, but also accelerating how technology can drive R&D to commercialization.

At HPE Education, it is believed that technology's greatest promise lies in its potential for positive change. Learn how we can use this change to overcome challenges and make a greater impact on the global good— together. HPE researchers and engineers are not only distinguished academically, but they're also driven by wide-ranging curiosity and creativity and committed to real-world innovation. So if you have the mind of a scientist and the heart of an entrepreneur, and you dream of having a lasting impact on your field and our world, they will help you realize that dream!

PROJECT CASE STUDIES



Enhancing Customer Experience in Elite Hotels

Trip Ease – an AI-based app for hotels that automates and customizes services based on a customers' needs using technology to help save their time while carrying out regular hotel service operations.

- Trip Ease app enables the customisation of an entire trip/stay at a hotel so that a regular customer can have a curated experience.
- The app enables updating of trip data as well so that preferences in terms of beverages, cuisines, room requirements, in-house shopping , etc. can be collected for an optimum experience.
- As the AI system learns a customer's likes and dislikes, the system will begin curating a custom experience itself.



Ensuring Road Safety

Sparrow – an AI – powered self-driving system can convert to manual drive at the driver's will.

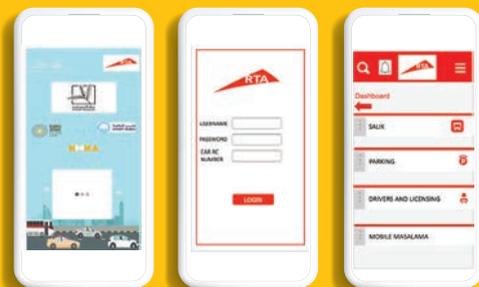
- Sparrow's self-driving system can convert to manual drive at a driver's will. When the detection panels on the windscreen of a car detect that the driver has lost concentration on the road, the car automatically changes to the autonomous driving mode and then provides the driver with a vibration through the chair to regain concentration.
- Sparrow has spherical wheels whose main advantage is its ability to move in different directions. This way the car will be able to coordinate its wheels according to a path that is suitable to prevent any accident. The spherical wheels also have the advantage of increasing the efficiency of the car. The wheels have a pressurized core system which allows it to regulate tyre pressure which will in turn counteract the pressure applied by the sharp objects.



NeuLife - Helping People with Central Nervous System (CNS) Disorders

NeuBand, a headset that uses EEG readings to predict oncoming seizures.

1. Neulife bring together and addresses multiple issues faced by patients with CNS disorders. The product, NeuBand, comprises of a headset, that can be used by CNS patients. The headset provides an EEG scan and the data is automatically uploaded to a cloud server.
2. The EEG scan data is worked on by an AI model to provide results on brain activity. Friends and family receive a notification of the results and can actively monitor the patient. In addition to the product, Neulife provides avenues for testing, consultation and further research on CNS disorders.



Curtailing Road Rage

Utilization of AI to control driving behavior

- An AI controlled user-interface that communicates with the driver and adjusts the car's controls depending on the mood of the driver.
- RFID Trackers and the optional Black Box (to be used only in extreme cases) will help the police monitor data of the driver along with the information gathered by the AI.
- While driving, the AI uses the data it has gathered so far to make sure that you do not go into a 'road rage' phase, and if you do it will make you come out of that phase.

Faculty Profile

Dr. LEK Hsiang Hui

Senior Lecturer
Department of Information Systems & Analytics
School of Computing
National University of Singapore



Dr. LEK Hsiang Hui is a Lecturer at the Department of Information Systems and Analytics at National University of Singapore (NUS). He graduated with Bachelor of Computing (Honours) in Computer Engineering and PhD in Information Systems from National University of Singapore.

He currently teaches undergraduate courses in Enterprise Systems Design and Development courses. He also conducts executive training in Healthcare Analytics at the Centre of Health Informatics (CHI).

He has won the University level Annual Teaching Excellence Award for AY 2015/16, AY 2016/17, AY 2017/18, and placed on ATEA honor roll for AY2018/19. In addition, he has also won the Faculty Teaching Excellence Award (FTEA) for AY2014/15, AY2015/16, AY2016/17, and placed on FTEA honor roll for AY2017/18.

He currently serves as one of the department's curriculum committee members which look into the curriculum planning. He is also one of the faculty advisors for the NUS BiZiT Society, a student-initiated society that aims to promote visibility for the business IT industry.

Mr. Shantanu Pandey

Information & Communications Technology,
Media & Information, Business & Management
Hewlett Packard Enterprise



Mr. Shantanu Pandey is a technology consultant who has worked on AI engines, systems, applications and portals for clients like TaxiForSure, OneIndia, CultureMachine, TableConnection, Canara Bank, HotWatch and more, with mix and match of tech. He has been training at NUS, Singapore for last 3 years conducting courses on AI, Machine Learning and IoT.

His passion for programming started at the age of six with C++ in the hope of developing games, and the awe of science has pushed him since then. After his stint with Microsoft, he got excited about the start-up ecosystem and eventually started his own company. He has also been associated with NUS and Corporate Gurukul and trained more than 10,000 students worldwide.

Shantanu's primary domains include Artificial Intelligence, Deep Learning, Machine Learning, Automation, Business, Entertainment, Fintech, Media, Services and Telecom.

Selective. Immersive. Transformational. What will the Internship be for you?

WHO SHOULD APPLY ?

This internship is recommended for you if:

You are a student of Grade 8-12 who:

- Is interested to understand the basics of AI and Machine Learning
- Wants to apply AI and Machine Learning in the field of Arts, Biology, Engineering & Technology, Medicine, Finance & Economics, Media & Entertainment, Science, Law and more..

PRE-REQUISITES

- You display critical thinking, problem solving and collaboration skills
- You're passionate to solve real-world problems and create impact by developing application using Machine Learning and AI

SELECTION CRITERIA

All applications are scrutinized on the basis of:

- Overall academic performance (grades) in current year or previous year
- Career Goals – Should be aligned to solving business problems using technology

DATES & DEADLINES

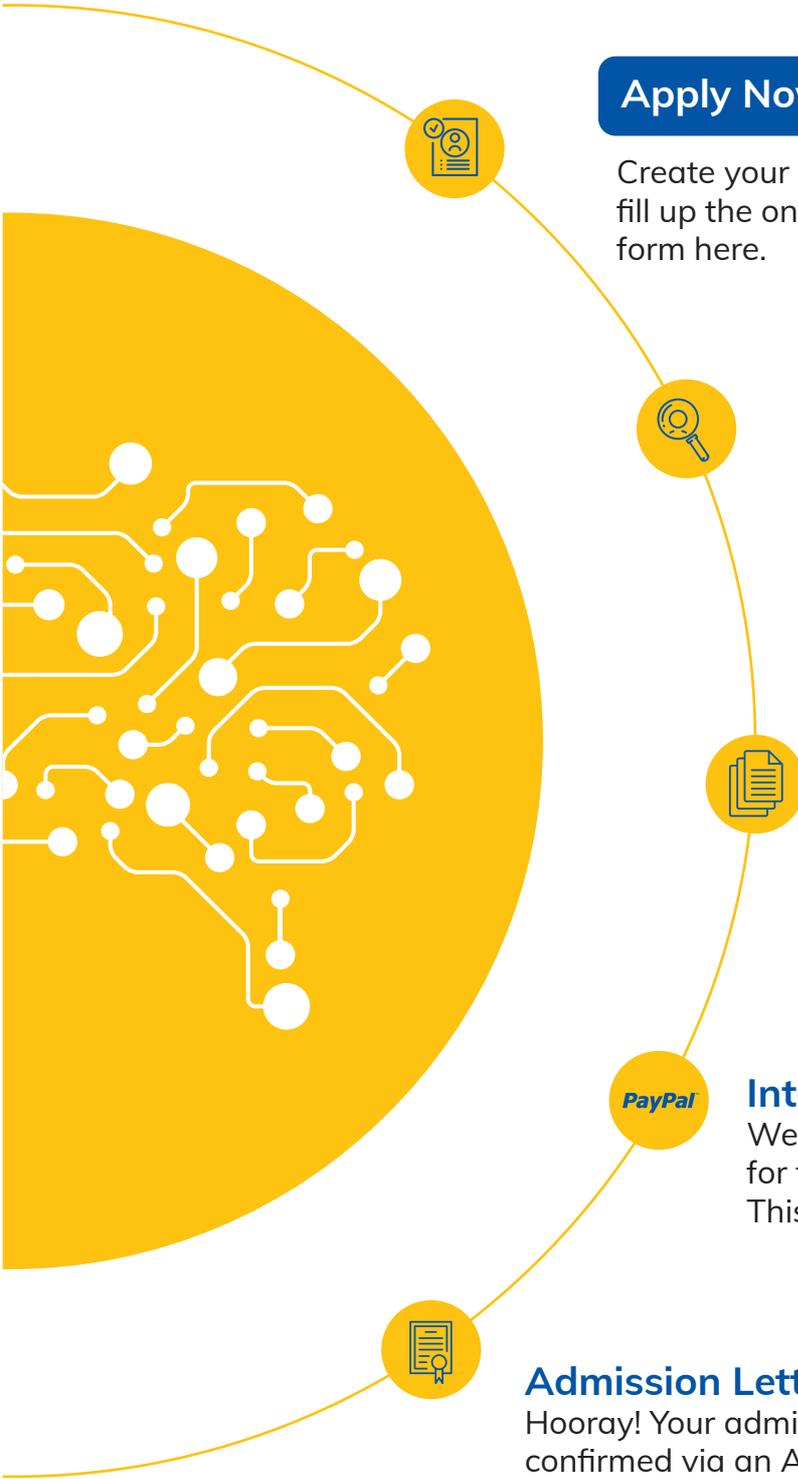
[Refer Website](#)

INTERNSHIP FEE

Introductory Offer - S\$ 1299



REGISTRATION PROCESS



Apply Now

Create your account and fill up the online application form here.

Selection

We will scrutinize your application on the basis of CGPA & Projects/Courses done

Offer Letter

If you are selected, we will have an interaction with you and your parents on career goals. This will be followed by an Offer Letter.

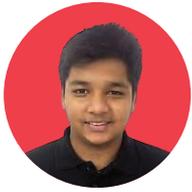
PayPal Internship Fee Payment

We will send you an invoice link for the Internship Fee payment. This is enabled through PayPal.

Admission Letter

Hooray! Your admission is confirmed via an Admission Letter

ALUMNI SPEAK



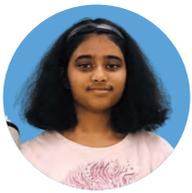
The programme opened doors of success for us and gave us a platform to present our ideas to faculty from world top 15 universities!

Samarth Goyal
Emerald Heights International School, Indore



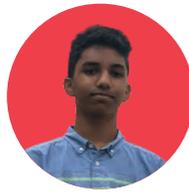
The programme helped me brush up my thinking skills as it demanded spontaneity and thinking out-of-the-box. It is surely an experience that would help me in the future; be it as an enhanced CV or as an aid to career choice.

Anushree Gupta
Daly College, Indore



This programme has been real learning platform for me. It has changed my perspective and my method of approaching complex problems. The instructors were very welcoming and spent time with understanding our projects and giving valuable feedback.

Niyathi Pramod
Our Own English High School, Sharjah



The programme is a wonderful platform. It provides transformational experience to participants and also aids enhancement of life skills. The team is extremely professional and the whole programme was well managed

Aman Fareez
Delhi Private School, Dubai



I enjoyed every bit of the programme – the interviews, working with different people, and especially the hard work during the project. Neither I nor my parents were aware of all the potential I had.

Gagan Khinwasara
Global Indian International School, Pune



It was an enlightening experience to present our research project before the esteemed faculty of NUS and NTU. I sincerely thank the Corporate Gurukul team for providing us with the opportunity along with constant guidance in the successful completion of our project.

Ankit Mohanty
Delhi Private School, Dubai



This was a tremendous journey with confronting real-life issues and happenings. The coordinating faculty were providing overwhelming support by helping with rescheduling of sessions to ensure I do not miss out on any session. All the sessions went as planned exposing us to the new realm and how we should work in order to cooperate these ideas and changes.

Vidit Bhandari
The Emerald Height International School, Indore



It provided great experience and knowledge to understand problems around us, how to analyze, tools and techniques and prioritize the solutions.

Nidhi
Oakridge International School, Bangalore

LEARNING OVERVIEW

Introduction to AI & ML, Introduction to Neural Networks & Deep Learning, Real-world application using AI and big data.

DURATION: 10 - 12 weeks

**INTRODUCTION TO
AI & BIG DATA**

**COMPARE AND
CONTRAST THE
VARIOUS TYPES OF
ML ALGORITHMS.**

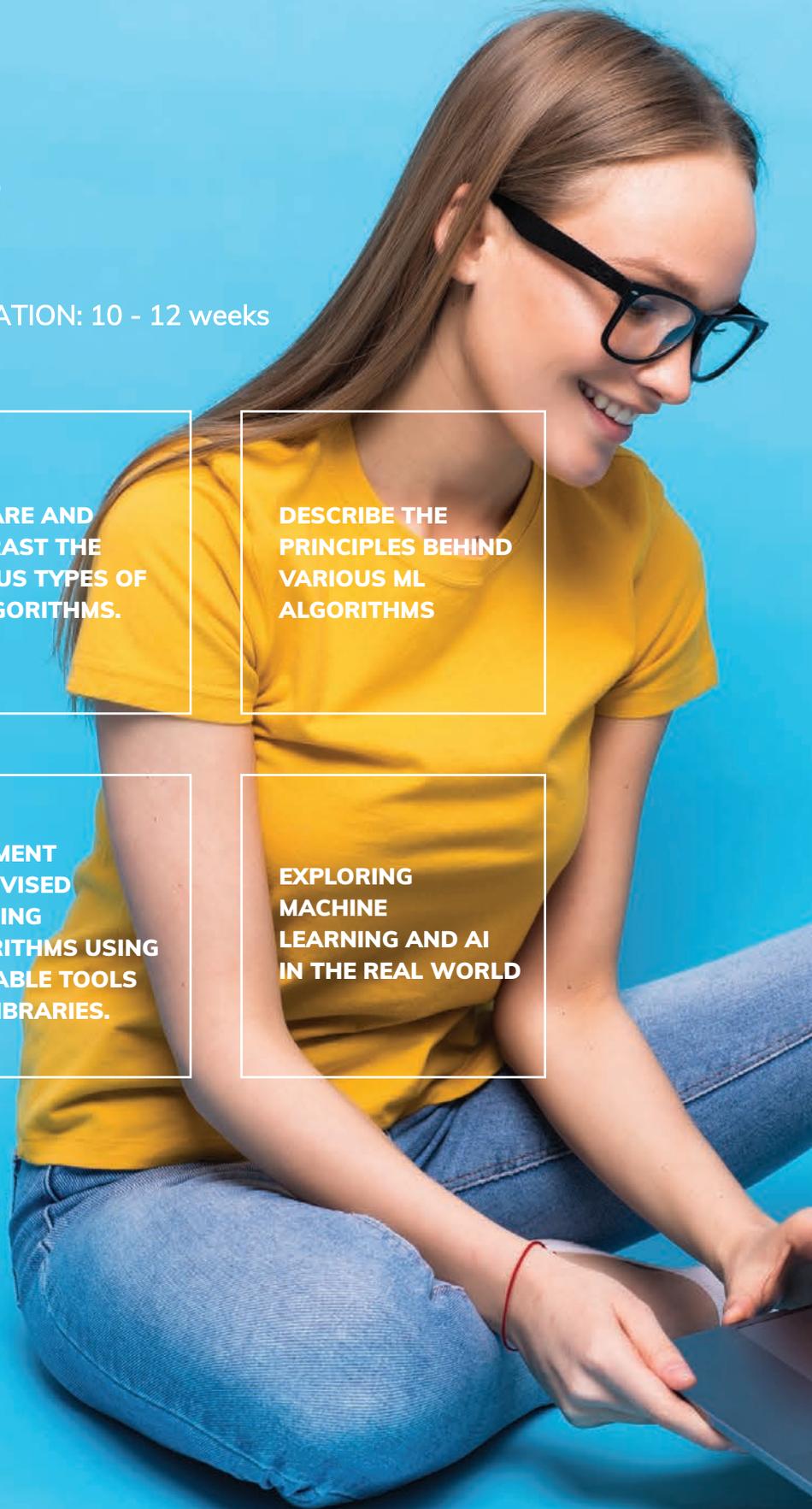
**DESCRIBE THE
PRINCIPLES BEHIND
VARIOUS ML
ALGORITHMS**

**FUNDAMENTAL IDEAS
BEHIND NEURAL
NETWORKS AND
DEEP LEARNING**

**IMPLEMENT
SUPERVISED
LEARNING
ALGORITHMS USING
AVAILABLE TOOLS
AND LIBRARIES.**

**EXPLORING
MACHINE
LEARNING AND AI
IN THE REAL WORLD**

**CASE STUDIES/
DISCUSSION ABOUT
ML/AI IN THE
REAL WORLD**



HOW DOES THE PROJECT WORK



01

CONCEPTUAL LEARNING SESSIONS

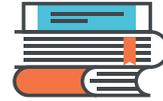
Conceptual understand of AI, Machine Learning and Deep Learning along with their applications in real-world.



02

ASSIGNMENTS

Assignments to apply your conceptual learning to simulated environments and applications.



03

PROJECT GROUP FORMATION

The students are grouped based on complimentary skillsets, their areas of passion and academic track record.



06



PROJECT SUBMISSION

Completed project is submitted to NUS and HPE faculty.



05



PROJECT ROLL OUT

Group start working on their internship project based with guidance from faculty of NUS and HPE.



04



PROJECT SELECTION

The groups select an internship project in their preferred domain and a real-world problem which they can solve using AI.



07



PROJECT PRESENTATION

The group present their project to assessors from NUS and HPE.



08



PROJECT ASSESSMENT

Formative and summative assessment of student projects. Letter of Recommendation to top performers by NUS and HPE.

ALUMNI DESTINATIONS



Sumedh Rathi
Alumni (Research and Innovation Programme) Received admit from University of California, USA



Naquiya Barwaniwala,
Alumni (Research and Innovation Programme) Received admit from Drexel University, Pennsylvania, USA



Anushree Gupta,
Alumni (Research and Innovation Programme) – Received admit from UCL, London, UK



Pratyusha Nyati,
Alumni (Research and Innovation Programme) - Received admit from Singapore Management University, Singapore



Ish Dutt, Alumni,
(University Immersion Programme),
Nominated by Jindal Global Law School for Stockholm University summer programme



Harsh Tekriwal, Alumni
(University Immersion Programme)
Received admit from SP Jain Institute of Management & Research (SPJIMR)



Shivam Mulchandani,
Alumni (Research and Innovation Programme) Received admit from UCL, London, UK



Aamir Nazir
Alumni (Research & Innovation Programme)
Google Assistant Developer - Developed Action for Google assistant that gained over 100,000 users.

PARTICIPATING SCHOOLS

INDIA



Mayo College,
Ajmer



Daly College,
Indore



Emerald Heights
International School,
Indore



Sai International
School, Odisha



Global Indian
International
School

Global Indian International School
(GIIS), Pune



DPS Gurgaon



DPS North,
Bangalore



DPS East,
Bangalore



OAKRIDGE
INTERNATIONAL SCHOOL
BENGALURU
A NORD-ANGELIA EDUCATION SCHOOL

Oakridge International
School, Bangalore



IN OMNIA
PARATUS
INDUS
INTERNATIONAL SCHOOL
PUNE

Indus International
School, Pune

UAE



DPS, Sharjah



DPS, Dubai



Springdales
School, Dubai



Ambassador
School, Dubai



Indian High School,
Dubai



جيمس مدرستنا الهندية
GEMS OUR OWN INDIAN SCHOOL

Our Own Indian
School, Dubai



THE MILLENNIUM SCHOOL
SCHOOL OF EXCELLENCE

The Millennium
School, Dubai



EXCELLENCE
GEMS Modern
Academy, Dubai

GEMS Modern
Academy, Dubai



THE WINCHESTER
SCHOOL

The Winchester
School, Dubai



OUR OWN ENGLISH SCHOOL
AI WARQA DUBAI

Our Own English School,
AI Warqa Dubai



مدرسة أبوظبي الهندية
ABU DHABI
INDIAN SCHOOL

Abu Dhabi Indian
School, Abu Dhabi



MAYOOR PRIVATE
SCHOOL

Mayoor Private
School, Abu Dhabi



JSS INTERNATIONAL SCHOOL
JSS INTERNATIONAL SCHOOL
Dubai

JSS International
School, Dubai

SINGAPORE



Global Indian
International
School

Global Indian International
School (GIIS), Singapore



ANDERSON SERANGOON
JUNIOR COLLEGE

Anderson Serangoon
Junior College, Singapore



ST JOSEPH'S INSTITUTION
INTERNATIONAL SCHOOL
A Lasallian Catholic School

SJI International School,
Singapore

KENYA



Braeside High School,
Kenya

LEARNING FOR LIFE

We believe in creating value for our students across their journey in life. Hence our interventions are designed throughout your learning journey for life - from school to university to industry. Our recommendations during your School Journey which progressively builds your skills through applied experiential learning interventions.

GRADE 7-8

**Leading and Practicing
Social Change**
ONLINE CERTIFIED
INTERNSHIP

GRADE 8-12

**AI & Machine Learning for
Young Innovators (AI & ML)**
ONLINE CERTIFIED INTERNSHIP
or EXPERIENTIAL ON-CAMPUS

GRADE 8-12

**Global Research and Innovation
Programme (GRIP)**
ONLINE CERTIFIED INTERNSHIP
or EXPERIENTIAL ON-CAMPUS

GRADE 11-12

**Entrepreneurship and
Tech Innovation**
ONLINE CERTIFIED
INTERNSHIP



13 years | 21 countries | 30+ cities | 15 nationalities
40+ schools | 70+ universities | 150,000+ alumni
50+ faculty | 200+ research scholars
10+ applied learning programmes



If you come into it with a sense of purpose or desire for impact and you know perhaps where you want to channel it the GAIP will really help you unleash that

#GoodToGreat

Apply Now. Scholarships Available.



www.corporategurukul.com

Singapore HeadQuarter: 1 Wallich Street, #14-01, Guoco Tower, Singapore 078881

India Registered Office: 2201A World Trade Center, Brigade Gateway,

Malleswaram, Bangalore 560055

For more information on registration for the programme

Email: contact@corporategurukul.com

Website: www.corporategurukul.com