AI STUDENT OUTREACH PROGRAMME HANDBOOK

Version V1.4
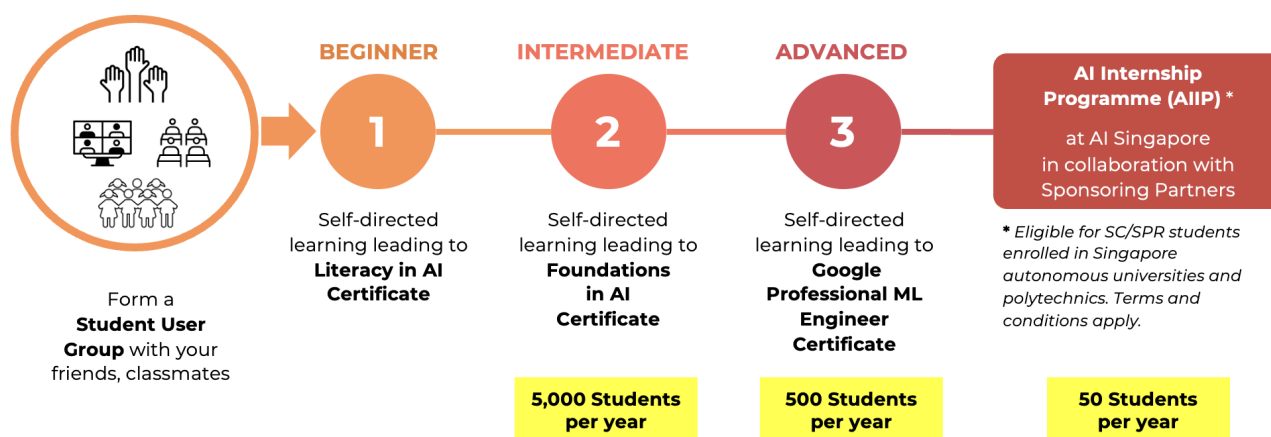
25 October 2022

AI Singapore
innovation 4.0, 3 Research Link #02-04 Singapore 117602 **|** www.aisingapore.org
AI Singapore is a national programme supported by the National Research Foundation and hosted by the National University of Singapore (Company Registration No: 200604346E)

ABOUT

AI Singapore (AISG)[1] has launched "AI Student Outreach Programme", which aims to promote AI literacy and proficiency among students from local Secondary Schools, Integrated Programme (IP) Schools, Junior Colleges, Institutes of Technical Education, Polytechnics and Universities. This programme is supported by Singapore's Ministry of Education (MOE).

GOALS

AI Student Outreach Programme has 3 levels to suit every student's AI learning appetite. Each level of completion offers an industry-recognized certification for students to showcase their achievements. Singapore university and polytechnic students who attained level 3 will have a chance to intern alongside AI Singapore's AI Engineers and AI Apprentices on real-world projects.

Form a **Student User Group** with your friends, classmates

BEGINNER

1

Self-directed learning leading to **Literacy in AI Certificate**

INTERMEDIATE

2

Self-directed learning leading to **Foundations in AI Certificate**

5,000 Students per year

ADVANCED

3

Self-directed learning leading to **Google Professional ML Engineer Certificate**

500 Students per year

AI Internship Programme (AIIP) *

at AI Singapore in collaboration with Sponsoring Partners

* *Eligible for SC/SPR students enrolled in Singapore autonomous universities and polytechnics. Terms and conditions apply.*

50 Students per year

Through the 3 levels, the students will gain:

- Programming skills like Python and/or R;

- Critical thinking skills needed to navigate and adapt to the changing world; and

- Practical experience and knowledge in AI projects.

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[1] AI Singapore is a national AI programme launched by the Singapore National Research Foundation (NRF) to anchor deep national capabilities in Artificial Intelligence (AI) thereby creating social and economic impacts, grow the local talent, build an AI ecosystem, and put Singapore on the world map.

Level 1

Level 1 promotes self-directed learning leading to the Literacy in AI Certification.

Literacy in AI Certification

Objective	To introduce learners into the world of Machine Learning and explore the topic of ethics in AI
Modules	AI Basics (Machine Learning for Everyone), AI Ethics, Hands-on Practice (Orange)
Estimated duration	5 hours
Learning Resources	- Self-directed learning (online) - Access to AISG Community Groups to support students' learning - Access to Ask-Me-Anything sessions to support students' learning, networking and career development
Recommended Pre-Learning	AI for Everyone (AI4E)®
Certificate issued	AI for Industry (AI4I)® – Literacy in AI Certificate

Eligibility

- Full-time students currently enrolled in local Secondary Schools, IP Schools, Junior Colleges, Institutes of Technical Education, Polytechnics and Universities

- Full-time National Servicemen (NSF)

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Application

- Applications open all year round.

- Form a student user group (SUG) with a minimum of 10 members from the same institution. New members can be added subsequently.

- Minimum of 70% of members must be Singapore Citizens (SC) and/or Singapore Permanent Residents (SPR).

- For NSF, form a group of at least 10 NSF, of which at least 70% have received an offer letter for the next level of education (from a university, polytechnic, or ITE). Maximum of 30% of the members may provide Letters of Intent in lieu of the offer letters.

- SUG members to create LearnAI Free Membership accounts. SUG leader to register the SUG here: https://learn.aisingapore.org/student-user-group-application/. SUG leader and members **MUST** use their school email address. Note: NSF may use their personal email address.

- SUG leader to accept the following Terms and Conditions:

  ○ I declare that the information provided in this application is true and accurate.

  ○ I declare that I will be responsible for all communications between AI Singapore and SUG.

  ○ I confirm that there is a minimum of 10 members from the same institution to start the SUG. New members can be added subsequently.

  ○ I agree that the purpose of SUG is to promote the use of artificial intelligence in their respective fields.

  ○ I confirm that 70% of the members are Singaporeans and/or Singapore Permanent Residents (SPR).

  ○ I acknowledge that SUG is encouraged to organize at least one (1) AI workshop per year. Acknowledge AI Singapore support in marketing collateral. All logo display has to be approved by AI Singapore. Obtain logo display requirements from AI Singapore when required.

  ○ I acknowledge that SUG can claim up to at most 2 workshops. Each workshop claim will be capped at $100 nett.

  ○ I acknowledge that SUG is encouraged to contribute at least one (1) social media article per year and tag AI Singapore.

  ○ I understand that the personal data collected will be used for the purposes of managing and administering the programme and may be disclosed to National University of Singapore, AI Singapore, supporting Singapore Government bodies of AI Singapore and AI Singapore's partners.

  ○ I shall defend, indemnify, and hold harmless AI Singapore, its subsidiaries, officers, directors, employees, agents, affiliates and partners from and against any claim,

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demand or legal proceeding, including legal expenses, made by third party or arising from or out of the applicant's breach of the terms and conditions herein.

○ AI Singapore reserves the right to make changes to the schedule, content, etc without prior notice.

○ I adhere to the code of conduct published on the AI Singapore Community website.

○ I acknowledge that I have registered for an account on the LearnAI portal and I am signing up to the above Student User Group.

○ I consent to the collection of my personal data by AI Singapore for the purpose of providing the Services to me.

○ I declare that the information provided in this application is true and accurate, and I will be the single point of contact for all communications between AI Singapore and the SUG.

○ I agree to acknowledge AISG in all SUG-related marketing collaterals and shall seek AI Singapore's prior approval before doing so.

○ I have read and agree to the following: Privacy Policy, Terms of Use, Code of Conduct and Legal.

Benefits

- AISG will provide reimbursement* for workshops organized by the SUG. Up to 2 workshops per calendar year and capped at $100 per workshop (inclusive of GST). *Subject to approval.

- **Claim Process**

  ○ SUG leader to send a request to learn@aisingapore.org within 1 month from the event date. AISG will do the verification within 21 working days.

  ○ Email title: "Student Outreach SUG Workshop Claim - [Full Name]_[SUG Name]_[Institutional Email]"

  ○ State your Full Name, SUG Name and Institutional Email Address (Note: NSF may use their personal email address)

  ○ List of supporting documents to be provided:

    ■ 1 actual event photo

    ■ Event agenda (including title, synopsis, discussion topics and speakers)

    ■ List of items you want to claim

    ■ Supporting receipts of expenses (soft copy and/or hard copy). Please send all original physical receipts to 3 Research Link 02-05, innovation 4.0, Singapore 117602 - attention: Chandra Gunawan/Jillian Zeng.

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- ○ Expenses can be for:

  - ■ Food & Beverages (including delivery charges)

  - ■ Venue rental

  - ■ Marketing collaterals (e.g. posters, factsheets, eDM etc)

  - ■ Materials for workshops/talks on actual day (e.g. stationeries, writing materials for discussion etc)

  - ■ Prizes, doorgifts, tokens-of-appreciation

  - ■ Transportation fees, Courier services

  - ■ Parking coupons

  - ■ Event logistics

Level 2

Level 2 promotes self-directed learning leading to the Foundations in AI Certification.

Foundations in AI Certification

Objective	To help learners understand and use AI appropriately and be able to program basic AI and data applications in Python.
Modules	Introduction to Python, Libraries and Data Manipulation, Exploratory Data Analysis, Statistical Thinking, Supervised Learning, Unsupervised Learning, Deep Learning, Other Programming Languages and Tools to Learn, and Data Science and AI in the Real World.
Estimated duration	140 hours
Learning Resources	- Self-directed learning (online) - Access to AISG Community Groups to support students' learning. - Access to monthly Ask-Me-Anything sessions to support students' learning, networking and career development.

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Pre-requisite	Literacy in AI Certification (Level 1)
Certificate issued	AI for Industry (AI4I)® – Foundations in AI Certificate

Eligibility

- Only for SUG members.

- Must have completed Literacy in AI Certification (Level 1).

Application

- Applications open all year round.

- SUG leader to apply on behalf of the SUG members online here: https://learn.aisingapore.org/sug-form-2-issue-coupons/.

- Minimum of 10 SUG members per application. New members can be added subsequently.

- SUG leader will receive a notification that the coupon codes have been distributed to the eligible members. SUG leader to inform eligible members on the availability of the coupon codes on their individual LearnAI accounts. Validity of coupon code is 1 month, starting from the form submission date.

- SUG members will use the coupon code to upgrade themselves to LearnAI premium membership.

- SUG members will get the DataCamp access code in their invoice to upgrade their DataCamp free account to premium account to have access to the content required.

- Skillsfuture credits and PSEA do not apply.

Benefits

- Each SUG member will be eligible for a discounted LearnAI Premium membership fee worth S$105 + prevailing GST to enroll in Foundations in AI course.

- Each SUG member will get 100% reimbursement of the membership fee if he/she completes the Foundations in AI course within 6 months from the LearnAI Premium membership's activation date.

- **Claim Process**
    - Each SUG member will send a request to learn@aisingapore.org within 3 months of the completion date of the Foundations in AI course for reimbursement of S$105 + prevailing GST.

    - Email title: "Student Outreach Level 2 Claim - [Full Name]_[Payment Receipt No]_[Institutional Email]"

    - State your Full Name, *School/Institution's Email Address, Student User Group Name

    - Attach:

        - Foundations in AI Certificate

        - AI Singapore Payment Invoice/Receipt sent to your email following your payment. You will find your name, email address and phone number in that invoice/receipt.

        - Note: NSF with Letter of Intent will have to attach an offer letter for the next level of education (from a university, polytechnic, or ITE) in order to claim.

    *Students have to use the email addresses issued by their school/institution in their LearnAI accounts. Otherwise, students have to change their email address in the LearnAI account to the email address issued by their school/institution before they claim. AISG will not process any refund with any personal email address.

    Note: NSF may use their personal email address.

    - AISG will do the verification within 14 working days.

Level 3

Level 3 promotes self-directed learning leading to the Google Professional Machine Learning Engineer Certification.

Google Professional Machine Learning Engineer Certification

Objective	Google Professional ML Engineer exam assesses student's ability to: ● Frame ML problems

	● Architect ML solutions ● Design data preparation and processing systems ● Develop ML models ● Automate and orchestrate ML pipelines ● Monitor, optimize, and maintain ML solutions
Learning Resources	● Self-directed learning (online) ● Google Cloud Skills Boost and Qwiklabs ● Access to AISG Community Groups to support students' learning.
Estimated duration	Refer to Google's cloud.google.com/certification/machine-learning-engineer
Pre-requisite	Foundations in AI Certification (Level 2)
Certificate issued	Google Professional Machine Learning Engineer Certificate

Eligibility

- SUG members or any non-SUG SC/SPR full-time students from local Secondary Schools, IP Schools, JCs, ITE, Polytechnics and Universities.

- Must have completed Foundations in AI Certification (Level 2).

Application

- Students to fill-up Level 3 Eligibility Form for eligibility check: https://learn.aisingapore.org/student-user-group-application-3/.

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- There are 2 application periods every year:

  - 1 January to 31 January

  - 1 August to 31 August

- Successful applicants will be notified via email.

- Students to complete Google Professional Machine Learning Engineer Certification and reimburse a one-time exam fee* upon obtaining the certificate, within 365 days from the acceptance email date. AISG will only reimburse the first 500 successful applicants per year.

- Students may also claim reimbursement for the 1-year subscription fee to Google Cloud Skills Boost and Qwiklabs credits* as long as the receipt dates are within 365 days from the acceptance email date.

  The maximum amount for the exam fee and 1-year subscription fee to Google Cloud Skills Boost and Qwiklabs credits that each student can claim will be SGD 877.40 (inclusive of GST).

- Students must have an active LinkedIn account. Successful applicants will be invited to and must join AISG AI Student Outreach Programme LinkedIn Group.

Benefits

- 1-year subscription to Google Cloud Skills Boost and Qwiklabs credits* to accumulate the required knowledge and skills to undertake the Google Professional Machine Learning Engineer Certification.

- Upon completion of Google Professional Machine Learning Engineer Certification and proof of certification, students will be reimbursed for a one-time exam fee*

  The maximum amount for the exam fee and 1-year subscription fee to Google Cloud Skills Boost and Qwiklabs credits that each student can claim will be SGD 877.40 (inclusive of GST).

- **Claim Process**

  - Student will send a request to learn@aisingapore.org within 3 months from the issue date of the Google Professional Machine Learning Engineer Certificate

  - Email title: "Student Outreach Level 3 Claim – [Your Level 3 Application Number] [Full Name] [Institutional Email]"

  - State your Level 3 Application Number, Full Name and Institutional Email Address

    Note: NSF may use their personal email address.

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- ○ Attach:

    - ■ Google Professional Machine Learning Engineer Certificate

    - ■ Google Professional Machine Learning Engineer Certificate Payment Receipt

    - ■ Google Cloud Skills Boost Subscription Payment Receipt (if applicable)

    - ■ Qwiklabs Subscription Payment Receipt (if applicable)

    - ■ Claim request to be submitted in SGD currency. Claimant to attach supporting document (credit card statement showing the SGD rate paid for the relevant expense claimed). If claimant does not have any supporting document or payment is indicated in other currencies, the actual claimed amount will be converted to SGD internally by AISG.

- ○ AISG will do the verification within 21 working days

- ○ AISG will invite student to join AISG AI Student Outreach Programme LinkedIn Group. Student is required to join the group in order to proceed with the claim reimbursement.

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AI Internship Programme (AIIP)

AI Internship Programme (AIIP) (in collaboration with Sponsoring Partners)

3 to 6 months paid internship with AISG in collaboration with sponsoring partners where successful applicants will work alongside AISG's AI engineers and AI apprentices on real-world industry projects with deployment deliverables.

Internship opportunities are subjected to the availability of sponsoring partners.

Eligibility

- Must have completed both Foundations in AI Certification and Google Professional Machine Learning Engineer Certification.

- Only for Singapore Citizen and Singapore Permanent Resident full-time students*

- Only for matriculated students* at the 5 Polytechnics and the 6 Autonomous Universities.
    - Singapore Polytechnic (SP)
    - Ngee Ann Polytechnic (NP)
    - Nanyang Polytechnic (NYP)
    - Temasek Polytechnic (TP)
    - Republic Polytechnic (RP)
    - National University of Singapore (NUS)
    - Nanyang Technological University (NTU)
    - Singapore Management University (SMU)
    - Singapore University of Technology and Design (SUTD)
    - Singapore Institute of Technology (SIT)
    - Singapore University of Social Sciences (SUSS)

* Sponsoring partners may impose further Terms and Conditions as part of stipend allowance criteria (such as citizen requirements, education levels etc).

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Application

- Application period will be announced on AISG website and via emails to eligible students.

- Students will submit the application form with their CV and supporting documents.

- Successful applicants will be shortlisted for interviews with AISG and sponsoring partners.

Benefits

- Interns will be paid up to S$2,000 monthly stipends, subjected to sponsoring partners' terms and conditions.

National AI Student Challenge

The annual challenge brings together SUG members and full-time students from local schools to come up with new and innovative uses of Artificial Intelligence. Participation is optional and does not affect the eligibility of students applying for Level 2 and 3 and the AI Internship Program.

Through this event, we hope to encourage:

- Critical and creative thinking skills needed to navigate and adapt to the changing world

- Increase the awareness of current and possible future issues of the use of AI

- Increase applications of AI technology

- Active involvement in shaping their future using AI technology

The winning teams will receive prizes from AI Singapore.

More details will be announced nearer to the date of the challenge.

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