

RETHINK

AI



Kami is an award winning deep-tech company specialised in AI and machine learning research & development. On a mission to make AI truly accessible, Kami is particularly keen on improving machine-human interaction with Natural Language Processing.

Having won the "Most Investible Company" award from StartPlanetNI Accelerator 2017, Kami was invited by the UK Department for International Trade to join the Global Entrepreneurs Programme (GEP). After assessing a comparative lack of high-quality and cutting-edge NLP solutions in Asia, Kami returned to Hong Kong in Q4 2017 to begin developing Asian NLP frameworks, even publishing a research paper on 27th December, 2018¹.

¹. You can read the research paper at: <https://arxiv.org/abs/1812.10408>

FOUNDED: 2015

LOCATION: Hong Kong & United Kingdom

TEAM SIZE: 15+ Members

PATENTS: 2 US patents

SOME OF OUR RENOWNED INVESTORS: HK Tech X (Sequoia China), ARM Accelerator – ARM China and Ex-Apple Marketing Director

Today, Kami is focusing on applying its extensive research & development experience in natural language processing to empower the next generation of intelligent automation software robots. Kami Digital Solutions assists corporations to define their digital transformation strategies with AI and big data.

"We make AI truly Accessible" - Kami Intelligence

Hyperbolic Deep Learning for Chinese Natural Language Understanding

Marko Valentin Micic¹ and Hugo Chu²

Kami Intelligence Ltd, HK SAR

¹marko.micic@kami.ai

²hugo.chu@kami.ai

Abstract

Recently hyperbolic geometry has proven to be effective in building embeddings that encode hierarchical and entailment information. This makes it particularly suited to modelling the complex asymmetrical relationships between Chinese characters and words. In this paper we first train a large scale hyperboloid skip-gram model on a Chinese corpus, then apply the character embeddings to a downstream hyperbolic Transformer model derived from the principles of gyrovector space for Poincare disk model. In our experiments the character-based Transformer outperformed its word-based Euclidean equivalent. To the best of our knowledge, this is the first time in Chinese NLP that a character-based model outperformed its word-based counterpart, allowing the circumvention of the challenging and domain-dependent task of Chinese Word Segmentation (CWS).



STARTPLANETNI ACCELERATOR

“最具投資價值企業”
“Most Investible Company”



AICONICS AWARDS 2017

“Best Intelligent Assistant Innovation”
“Best Innovation in NLP”
“Best Application of AI in Enterprise”
“Best Chatbot Experience”



ARM ACCELERATOR

“安創之星大獎”
“Best Startup Award”



ETNET FINTECH AWARDS 2018

“傑出人工智能對話聊天機器人方案”
“Outstanding Artificial Intelligence Chatbot Conversational Solution”



PASSIONATE ICT & AI PROFESSIONALS

Founders and Senior Members



Hugo Chu
AI Architect
(MSc. Machine Learning, UCL)



Simon Ho
CTO, Co-founder
(former IBM research engineer,
innovator of 2 US patents)



Alex Cheung
Founder and CEO
(Chief Architect of Riskpro,
Travelzen and Cherrypicks)



Joshua Sun
Chief Operation Officer, FC
(Hanson Robotics,
PCLL, LLB)

Advisors and Board Members



Carl Chen
Director
(ARM China Chief Strategist)



Professor Chen
Director
(HKX Technology Fund -
Sequoia China)



Dr. Jeanne Lim
Director / Head of Advisor
(former Hanson Robotics CEO)



Augustine Fan
Advisor
(CIO - Gallant Investment Partners, LP of
Eminence Ventures, Fresco and Space X)



Sharon Ee
Marketing Advisor / Investor
(former **Apple Market Director**)

business partners.

our trusted business partners offer comprehensive project experience, knowledge and skills to ensure clients receive successful **automation + ai** results.



current business development pipeline:





OUR LATEST INNOVATION KAMI NLG

Making Personalised Recommendations Possible

1. 菜餚：

選單 ▾

2. 大綱：

段落

字數範圍

包括

簡介

不可修改



食譜



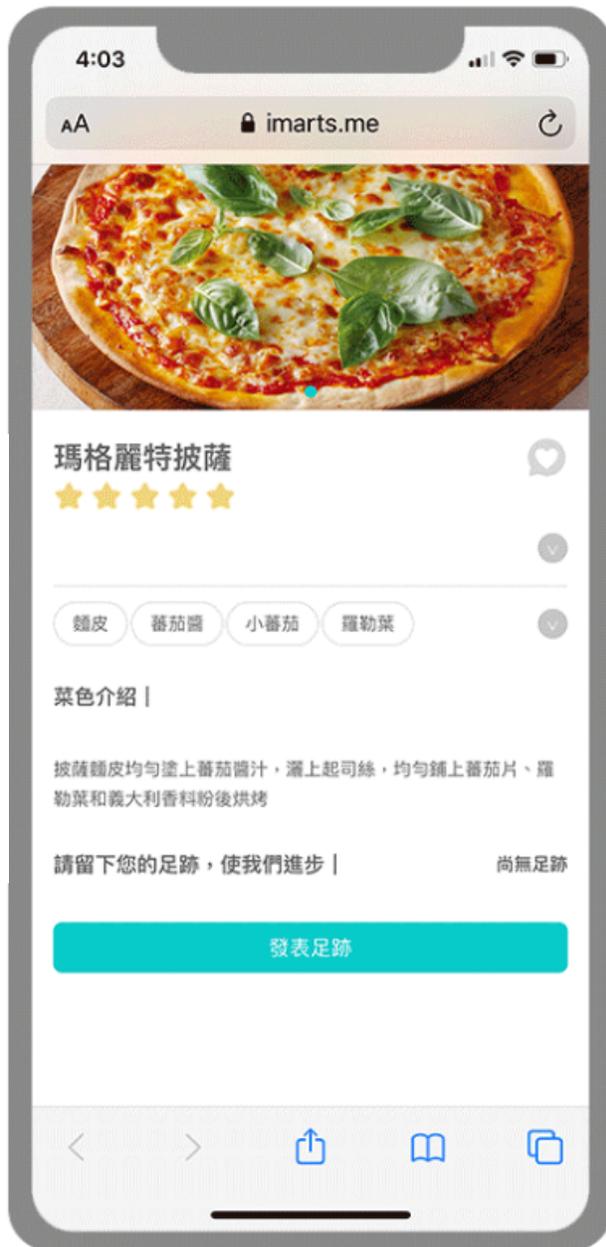
味道及口感



3. 生成：



請於上方輸入菜餚名稱然後按"內容生成"按鈕



**A food & beverage and travel advisor
for the most engaging experience**

-
*Taiwan, Japan, S.Korea**

iMarts致力成為實體店家的好夥伴，透過 OMO (Online Merge Offline) 智能旅程助理，幫助在地店家連結國際市場與國際旅客，為旅客提供即時翻譯、旅程助理及個性化推薦。簡單透過掃碼QRCode自動語言辨識解決多語問題，讓未來的國際旅遊更加便捷，打破語言隔閡的遺憾及窘境。

有別於一般傳統聊天機器人，回覆機器化、內容單調乏味，通過引進先進人工智慧自然語言生成技術，為用戶提供個性化回覆。更通過建立龐大餐飲知識圖譜，使產品推薦及簡介變得更為生動傳神，進而提升店家主動銷售能力，可以輕鬆完成品牌與商品故事行銷，精準鎖定目標客群，有效幫助店家提升業績。

目前，已經與台灣觀光巴士、以及不同縣市的國際夜市商圈，例如：東大門、永康、寧夏、信義、逢甲等商圈進行區域導入合作。

iMarts 更於2019年10月落地日本東京，針對2020年奧運的多語需求，雖然因為疫情延後到2021年，我們已經於本年三月完成沖繩觀光廳的區域項目，可以期待疫情復甦後的全面導入機會。

當然，同樣擁有高度多語需求的韓國市場，我們已與大邱觀光廳合作，於疫情過後進行韓屋的場域整合，未來在韓國可以成為指標性項目。

iMarts商業模式與推廣策略 (S2B2C)

關鍵因素：強化S

1. 旅遊生態是由點-線-面組成，最小觀光效益以面為單位，也就是區域或商圍為主。
2. 區域或商圍多有地方勢力管理（統稱：商圍協會），但大多數商圍協會對店家並無絕對影響力，導致區域資源整合困難度高。
3. 需要強化協會管理能力與整合主導性。

店家服務資訊外語化：2B

1. 提供店家服務外語化的剛需，吸引店家成為iMarts會員，並由商圍協會為主要服務窗口。
2. 免費提供商圍網站模組給商圍協會作為網站使用，可以統一且即時更新店家上架資訊，並提供店家廣告投放功能給協會，讓協會取得關鍵影響力與管理權，讓更多店家願意配合導入。

預期成果與成效

1. 透過iMarts點線面整合特性，提供商圍資源整合能力，並且升級多語友善內容，達到更即時有效的推廣服務。
2. 商圍協會成為iMarts最佳在地區域管理夥伴，共同建置運營服務供應鏈，且透過智能個性化推薦與廣告服務上架分潤達到雙贏結果。



iMarts 市場推動成果：花蓮



日前針對花蓮商家建置多語化服務，獲得花蓮市長魏嘉賢大力支持，並由花蓮市公所策劃推廣讓更多有意願的商家加入，通過數位轉型，提升花蓮服務業質素。

花蓮市已簽約重量級商家，包括：**阿美麻糬**、**一心泡泡冰**、**豐興餅舖**、**德記豆乾**、**柴魚博物館**、**鐵道園區**、**立川漁場**、**東大門夜市**等觀光重點商家，都已經陸續導入iMarts智能多語資訊服務，今年七月前預計導入約100家，提升花蓮市國際服務品質。



花蓮市長都說：讚！

iMarts 市場推動成果：台北觀光巴士



完成與台北觀巴簽約，正式合作協助台北觀巴停靠站附近商圈（**西門商圈、寧夏商圈、永康商圈、迪化商圈、文創園區、大直商圈、信義商圈、周圍店家**）整合與多語導入，預計總導入家數為**500**家，未來觀巴能提供旅客更完整的旅遊及聯合消費資訊。

立備忘錄人

甲方：愛碼市智能科技(股)有限公司

代表人：官欣怡

職稱：執行長

地址：臺北市忠孝東路四段 221 號 12 樓

統一編號：50890099

公司大小章：



乙方：台灣觀光巴士有限公司

代表人：徐范煦敏

職稱：協理

地址：台北市內湖區新湖三路 237 號 3 樓

統一編號：96936251

公司大小章：



中華民國 109 年 4 月 29 日

iMarts 市場推動成果：寧夏與西門商圈



拜訪寧夏夜市理事長，協同觀光巴士業者共同推動友善多語環境建置，得到理事長大力支持與讚揚，同時也希望正在規劃的網站也能由iMarts來協助整合，MOU準備中正積極安排六月的說明會。

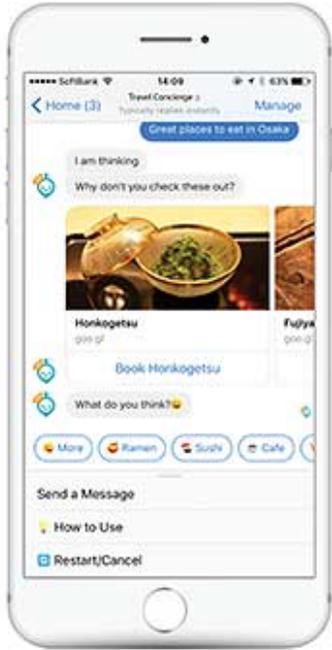


日前與西門商圈理事長報告與觀巴的合作方案，西門商圈理事長非常驚喜科技的力量，既然能將傳統離線地圖與折扣紙本整合，未來能幫西門商圈業者做更大的行銷與推廣，期望在接下來的地圖與折扣紙本上有近一步合作，商家推動也全力配合支持與推廣。

飯店+ AI 智能助理功能



三大基本應用：



當地基本服務

- 餐廳推薦
- 美食推薦
- 熱門伴手禮



飯店基礎服務

- 房間服務
- 叫車服務
- 退房時間
- 點餐服務
- 飯店服務時間



當地旅遊資訊

- 附近景點推薦
- 熱門活動
- 目的地活動
- 旅遊推薦
- 觀光建議





KAMI EDUCATION

making personalised education scalable

472k

1.2 million

tech talent shortage with 9 out of 10
businesses struggling to hire IT professionals

- *indeed.com*

total IT workforce are needed by 2026 when
545K of existing software engineers would
have left the market by then.

- *the Bureau of Labor Statistics*

Staff **re-skilling and training** is inevitable
and it's **expensive...**

Accenture has retrained almost 300,000
employees over the past 4 years

amazon.com

set up a **\$700 million** fund to
retrain 1/3 of its U.S. workforce


pwc

topped the list with
a **\$3 billion** investment commitment

the challenges



**Failing to address
the variable needs of
individual learners**



**High cost of training and
re-skilling with poor results**



**Unknown quality of
new development hubs**

A Complete End-to-End Solution for Training, Qualification and Talent Management

eLearning with AI Tutor

Tailored online learning platform for programming with AI tutor that tracks learners' progress and personalises studying paths to fit individual progress

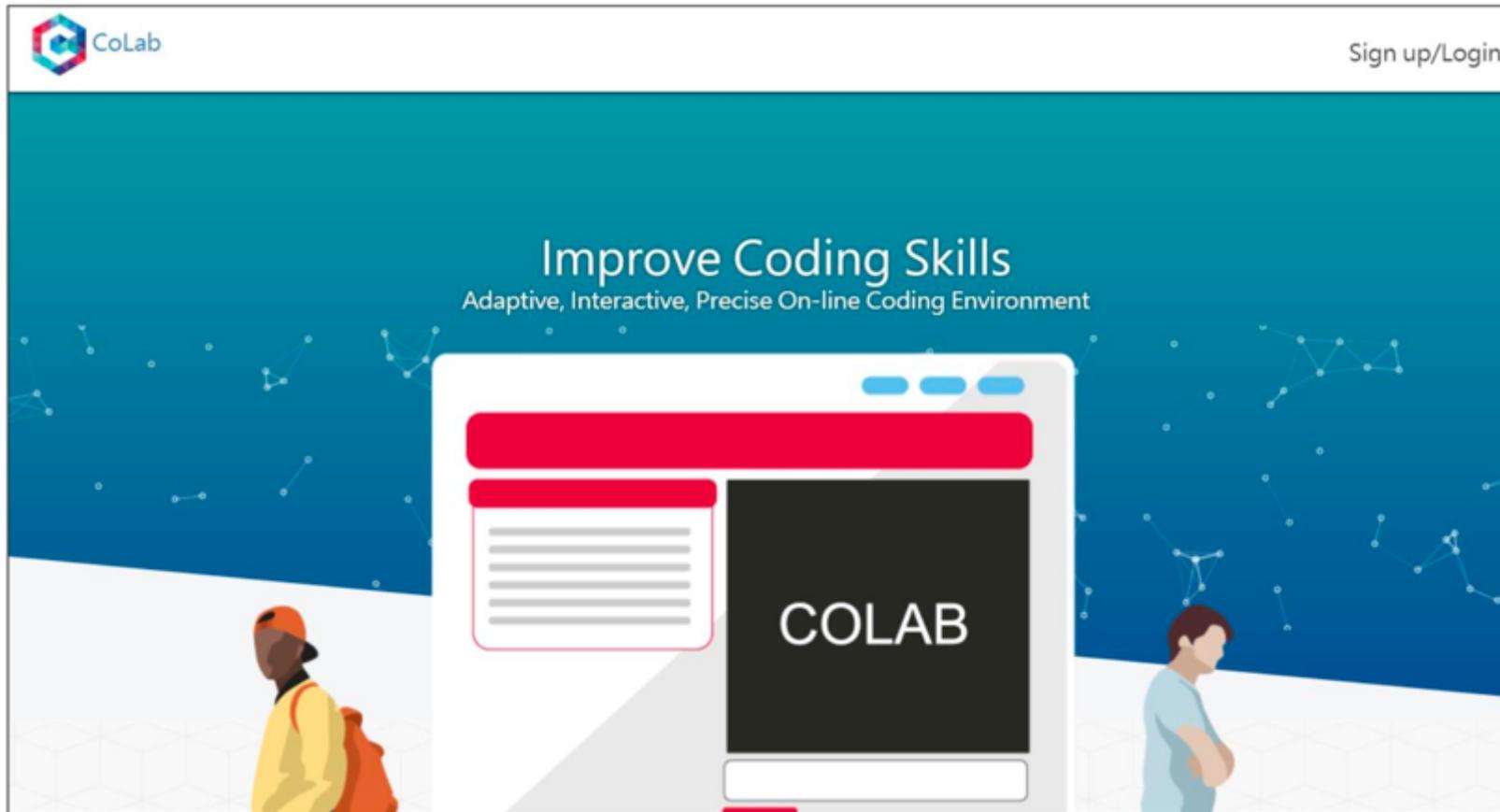
Authentic Software Development Exam

Being the World's first AI grading unbiased assessment system for ICT professionals

Global Talent Map for Big Data Analysis

Building the global talent map to provide insights for governments and companies for their talent strategies

In partnership with III, Proxor and renowned education institutions,
Kami Education provides a SaaS based learning and assessment
platform to cultivate ICT skills



Online ICT and Programming Education

Online Lesson Market Place

that pairs courses & tutors with learners

The screenshot shows the CoreLab website's course marketplace. At the top, there are navigation links for '瀏覽課程', '我的課程', '程式練習', and 'Alex'. Below the navigation, there are search filters for '課程類型' (set to '全部') and '課程名稱' (with a search input field). The main content area displays a grid of course cards. Each card includes a thumbnail image, a course title, a start date, and a number of students. The visible courses are:

- 全方位IT工程師就業養成班_週輔會 109班 (2020-04-29, 39 students)
- DEM5121 - Python程式設計 (4/20~4/22) (2020-04-18, 96 students)
- MFEE08前端工程師養成班 (2020-04-13, 203 students)
- 跨域Java軟體工程師就業養成班EEIT114 (2020-04-13, 196 students)

Learn Online with AI Tutor

The screenshot shows the CoreLab website's course content page for the '跨域Java軟體工程師就業養成班EEIT114' course. The page has a navigation bar with '總覽', '課程內容', '課程討論', '課程測驗', and '課程進度'. The '課程內容' tab is active, displaying a table of contents:

- 1. 瞭解Java
 - 1.1. 什麼是Java
 - 1.2. Java的特性
 - 1.3. 如何學習Java
- 2. Java入門準備
 - 2.1. 下載、安裝、認識 JDK
 - 2.2. 設定 Path 與 Classpath
 - 2.3. 編譯Java 程式
 - 2.4. 選擇開發工具
- 3. 語法入門
 - 3.1. Hello World
 - 3.2. 文字模式
 - 3.3. 資料與運算子
 - 3.4. 流程控制
- 4. 從 autoboxing、unboxing 認識物件
 - 4.1. 物件
 - 4.2. 裝箱與拆箱

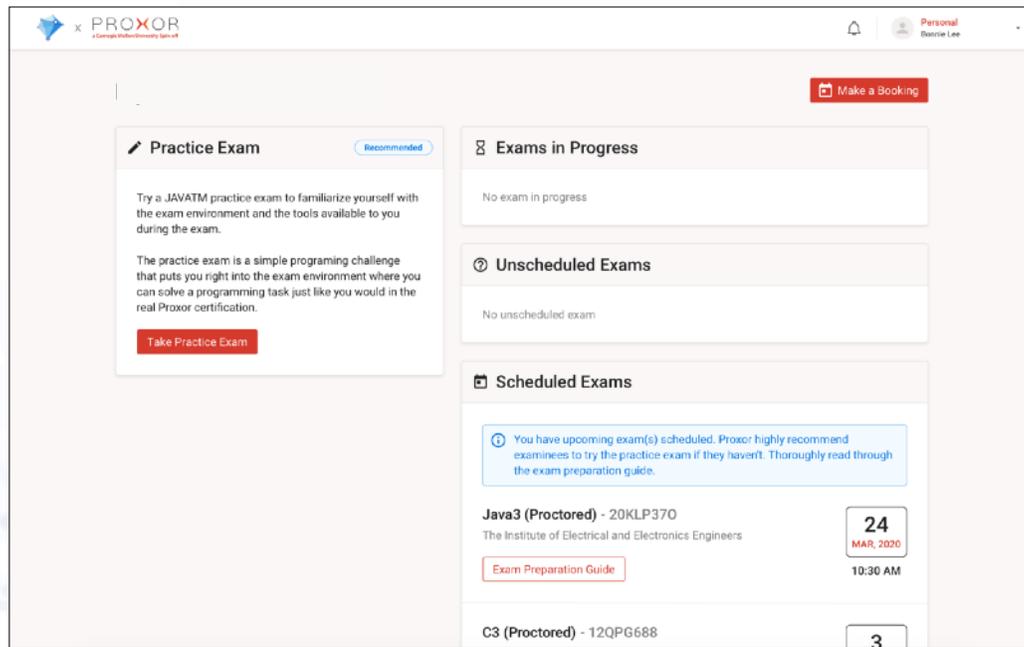
The '1.1. 什麼是Java' section is expanded, showing a detailed introduction to Java. The text explains that if you have no prior knowledge of Java, this chapter is for you, covering the language's role, characteristics, and applications. It also provides a list of key points for beginners to understand:

- 什麼是位元碼 (bytecode)
- Java 可以跨平台的原因
- Java 的三個應用領域 (平台)
- Java SE、JDK、JRE、JVM 的差異

At the bottom of the page, there is a section for '1.1. 什麼是Java' with a sub-section '1.1.1. 什麼是Java' and a '滿意度調查' (Satisfaction Survey) link, indicating it was completed on 2020-01-16 at 00:34:48.

Systematic & Personalised AI Tutorship

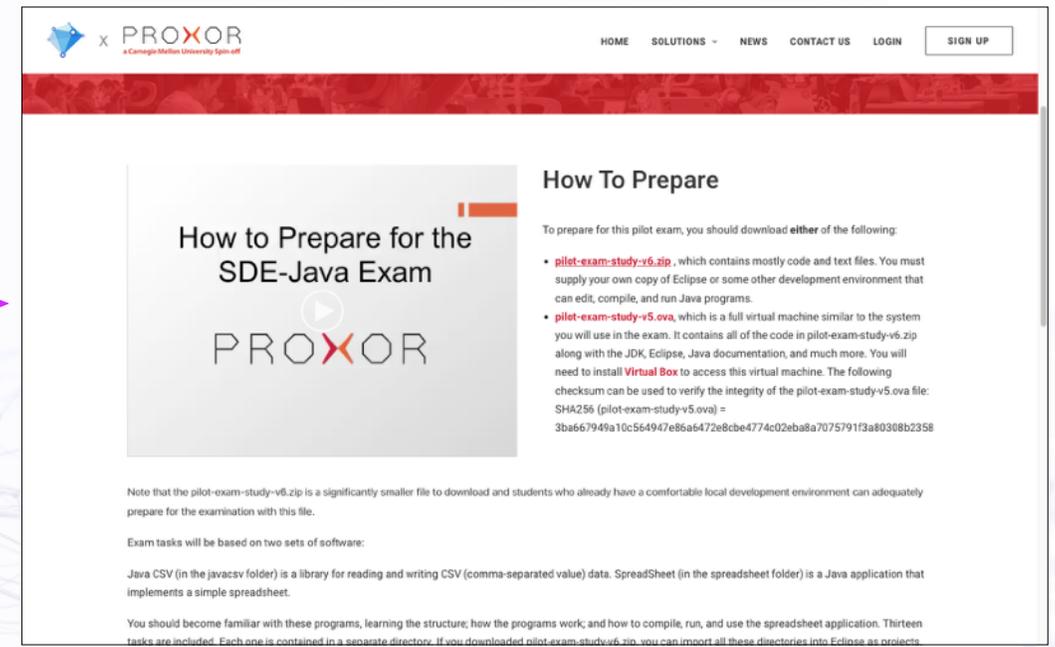
Personalised Courses with Machined Generated Materials & Exercises



The screenshot shows a user dashboard for Proxor. The user is logged in as 'Personal Boonin Lee'. There is a 'Make a Booking' button in the top right. The main content area is divided into several sections:

- Practice Exam** (Recommended): A card with a pencil icon. It contains text: "Try a JAVATM practice exam to familiarize yourself with the exam environment and the tools available to you during the exam." and "The practice exam is a simple programming challenge that puts you right into the exam environment where you can solve a programming task just like you would in the real Proxor certification." Below the text is a red button labeled "Take Practice Exam".
- Exams in Progress**: A card with a clock icon. It contains the text "No exam in progress".
- Unscheduled Exams**: A card with a clock icon. It contains the text "No unscheduled exam".
- Scheduled Exams**: A card with a calendar icon. It contains a blue notification box: "You have upcoming exam(s) scheduled. Proxor highly recommend examinees to try the practice exam if they haven't. Thoroughly read through the exam preparation guide." Below this, there are two exam entries:
 - Java3 (Proctored) - 20KLP370**: The Institute of Electrical and Electronics Engineers. A red button labeled "Exam Preparation Guide". A date badge for "24 MAR, 2020" and a time "10:30 AM".
 - C3 (Proctored) - 12QPG688**: A date badge for "3".

Machine Graded Assessment



The screenshot shows the "How To Prepare" page for the SDE-Java Exam. The page has a red header with navigation links: HOME, SOLUTIONS, NEWS, CONTACT US, LOGIN, and SIGN UP. The main content area features a large video player with the title "How to Prepare for the SDE-Java Exam" and the Proxor logo. To the right of the video player is a "How To Prepare" section with the following text:

To prepare for this pilot exam, you should download **either** of the following:

- pilot-exam-study-v6.zip**, which contains mostly code and text files. You must supply your own copy of Eclipse or some other development environment that can edit, compile, and run Java programs.
- pilot-exam-study-v5.ova**, which is a full virtual machine similar to the system you will use in the exam. It contains all of the code in pilot-exam-study-v6.zip along with the JDK, Eclipse, Java documentation, and much more. You will need to install **Virtual Box** to access this virtual machine. The following checksum can be used to verify the integrity of the pilot-exam-study-v5.ova file: SHA256 (pilot-exam-study-v5.ova) = 3ba667949a10c564947e86a6472e8cbe4774c02eba8a7075791f3a80308b2358

Below the list, there is a note: "Note that the pilot-exam-study-v6.zip is a significantly smaller file to download and students who already have a comfortable local development environment can adequately prepare for the examination with this file." and a section titled "Exam tasks will be based on two sets of software:" followed by a description of "Java CSV" and "SpreadSheet".

Real World Business Coding Challenges

2.5 hours Life-like Assignment

PROXOR

Do not attempt to complete this examination before reading and understanding these directions.

Overview

- 1 Overview**
 - Environment
- 2 Core Exam**
 - Tasks Assignment
 - IDE Selection
- 3 Grading Submission**

Instructions (15 mins): Please read before attempting the exam.

3 Tasks (120 - 150 mins): It is where most of your time and attention should go.

Grading Submission (15 mins): Solutions must be submitted for grading.

Total: 180 mins
Your allocated time starts now.

Please go through the following instructions carefully and budget your time accordingly.

Real Coding Environment with popular IDE

Eclipse

Java - average-ss/build.xml - Eclipse Platform

```
<?xml version="1.0" encoding="UTF-8" standalone="no"?>
<!-- WARNING: Eclipse auto-generated file.
Any modifications will be overwritten.
To include a user specific buildfile here, simply
include this file with the processing instruction <?eclipse
buildfile="user-buildfile.xml" as the first entry and export the buildfile again -->
<property environment="env"/>
<property name="ECLIPSE_HOME" value="/usr/lib/eclipse"/>
<property name="average-ss-grade.location" value="..../overc
<property name="debuglevel" value="source,lines,vars"/>
<property name="target" value="1.6"/>
<property name="source" value="1.6"/>
<import file="submission.xml"/>
<path id="JUnit 4.libraryclasspath">
<pathelement location="${ECLIPSE_HOME}/dropins/jdt/plu
<pathelement location="${ECLIPSE_HOME}/dropins/jdt/plu
</path>
<path id="average-ss.classpath">
<pathelement location="bin"/>
<path refid="JUnit 4.libraryclasspath"/>
</path>
<target name="init">
<mkdir dir="bin"/>
<copy includeemptydirs="false" todir="bin">
<fileset dir="src">
```

Package Explorer: average-ss, src, JRE System Library [java-7-ope, JUnit 4, nbproject, build.xml, readme.txt, submission.xml, exps-have-numbers-ss, flexible-read-display-csv, javacsv, number-display-ss, numbers-as-expressions-ss, open-save-ss, parentheses-ss, readwritefile, spreadsheet, simple-read-display-csv, stat-greatest-val-csv, stat-greatest-val-csv, stat-greatest-val-csv, sum-ss, white-space-ss, write-html-csv

Outline: ECLIPSE_HOME, average-ss-grade.l, debuglevel, target, source, import submission, JUnit 4.libraryclass, average-ss.classpa, init, clean, cleanall, build [default], build-subprojects, build-project, build-refprojects, submission_name [, submission_from_i, Open With

1 Ant Build (SHIFT+ALT+X Q) Run As, Debug As, Profile As, Open Javadoc Wizard..., Team, Compare With, Replace With

Machine Graded Assessment Report with Detail Learning and Performance Analysis

Comprehensive Report

 x PROXOR
A COMPANY OF UNIVERSITY SPECIAL

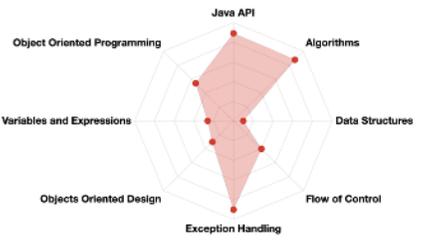
GRACE WONG
A PROXOR CERTIFIED
JAVA PROXOR CERTIFICATION

EXAM DATE
April 9th, 2020 9:58 AM



EXAM REPORT

Core Skill Breakdown

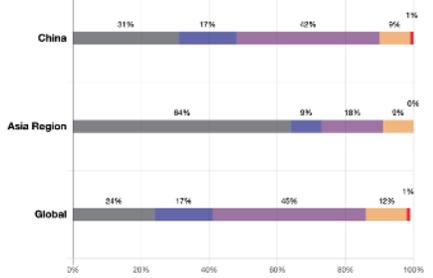


Skill	Score
Java API	High
Algorithms	High
Data Structures	Medium
Flow of Control	Medium
Exception Handling	Medium
Objects Oriented Design	Medium
Variables and Expressions	Medium
Object Oriented Programming	Medium

AutoEquating with absolute scores making results truly comparable

GLOBAL ICT TALENT DISTRIBUTION

How Do You Compare?



Region	PROXOR 1	PROXOR 2	PROXOR 3	PROXOR 4	PROXOR 5
China	31%	17%	42%	9%	1%
Asia Region	64%	9%	18%	0%	0%
Global	31%	17%	40%	12%	1%

Proxor Rating System

- PROXOR 1: BEST of the Best
- PROXOR 2: Exceptional
- PROXOR 3: Satisfactory
- PROXOR 4: Needs Improvement
- PROXOR 5: Not rated

LEARNER'S SUMMARY

total questions	10	correct questions	9	time spent	02:08:35	score	92
-----------------	----	-------------------	---	------------	----------	-------	----

Value Propositions

Authentic Assessment

with truly comparable grading

Promote the best
software engineering practice

Full Access to participants'
Granular Reports

Affordable & Personalised
tutorship with AI tutor

CASE STUDIES





AI Tutor and machine graded assessment for Malaysian universities

-
South East Asia

kami education.

partnering with top research institutions and
recognised by forward-looking educators and industry leaders



Universiti Teknologi Malaysia (UTM) is a premier [Malaysian](#) public research-intensive university in engineering, science and technology. Ranked 187 in the QS world university rankings. UTM has more than 5,000 international students from more than 120 countries, it is the highest research university in Malaysia.