



WORLD BANK GROUP

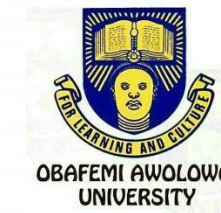
# JobKred – WB ACE Universities Skills Profiling Study Pilot (Phase-1)

Bridging Industry to Educational skills gaps at the  
University level

Comparing to Global skills demand at the University  
and Industry level

Study conducted on **Computer Science / Computer  
Engineering Industry & Students**

Pilot Phase 1 - June- July 2020

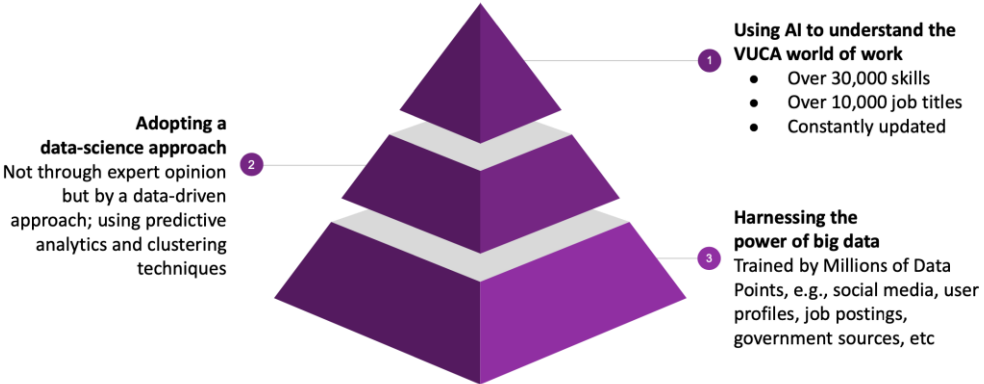


## ABOUT US

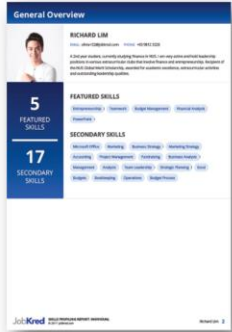
JobKred is a **workforce transformation platform** that uses **AI** to help organisations and individuals stay **future-ready** for the rapid changes in today's economy



# Digital Skills Gap Assessment using Online Tool



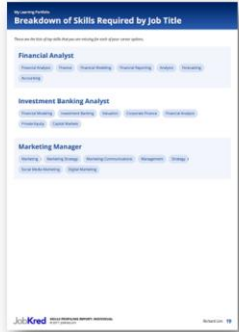
**1 SKILLS PORTFOLIO**  
Identify and showcase portfolio of work skills, experience and education.



**2 CAREER PORTFOLIO**  
Get career recommendations matched to skills; explore career pathways.



**3 LEARNING PORTFOLIO**  
Understand skill gaps and prioritise learning goals towards career aspirations.



797

Users

535

Fully Profiled

97%

Computer Science/Engineering

5006

Skills Identified

2867

Career Aspirations Chosen

21992

Skills Gaps Identified

# Key Findings – ACE x Labor Market(LM) Data

*Top 10 skills from ACE students  
in Computer Science disciplines*

Skill Name	Rank
HTML	1
Java	2
CSS	3
Computer Science	4
JavaScript	5
Programming	6
Databases	7
MySQL	8
Python	9
C++	10

*Top 10 skills in demand by  
Computer Science Industry  
(National(Kenya), HeadAI)*

Skill Name	Rank
Communication	1
Training	2
Computers	3
Research	4
Leadership	5
Marketing	6
English	7
Databases	8
Presentation	9
Access	10

*Top 10 skills in demand by  
Computer Science Industry  
(Global, JobKred)*

Skill Name	Rank
Communication	1
Management	2
Information Technology	3
English	4
Testing	5
SQL	6
Programming	7
Java	8
Software Development	9
Training	10

Students perceived to be highly prepared with **Technical Skills**

# Key Findings – ACE Skills Gaps

Top 10 Skills Gaps from ACE students  
in Computer Science disciplines

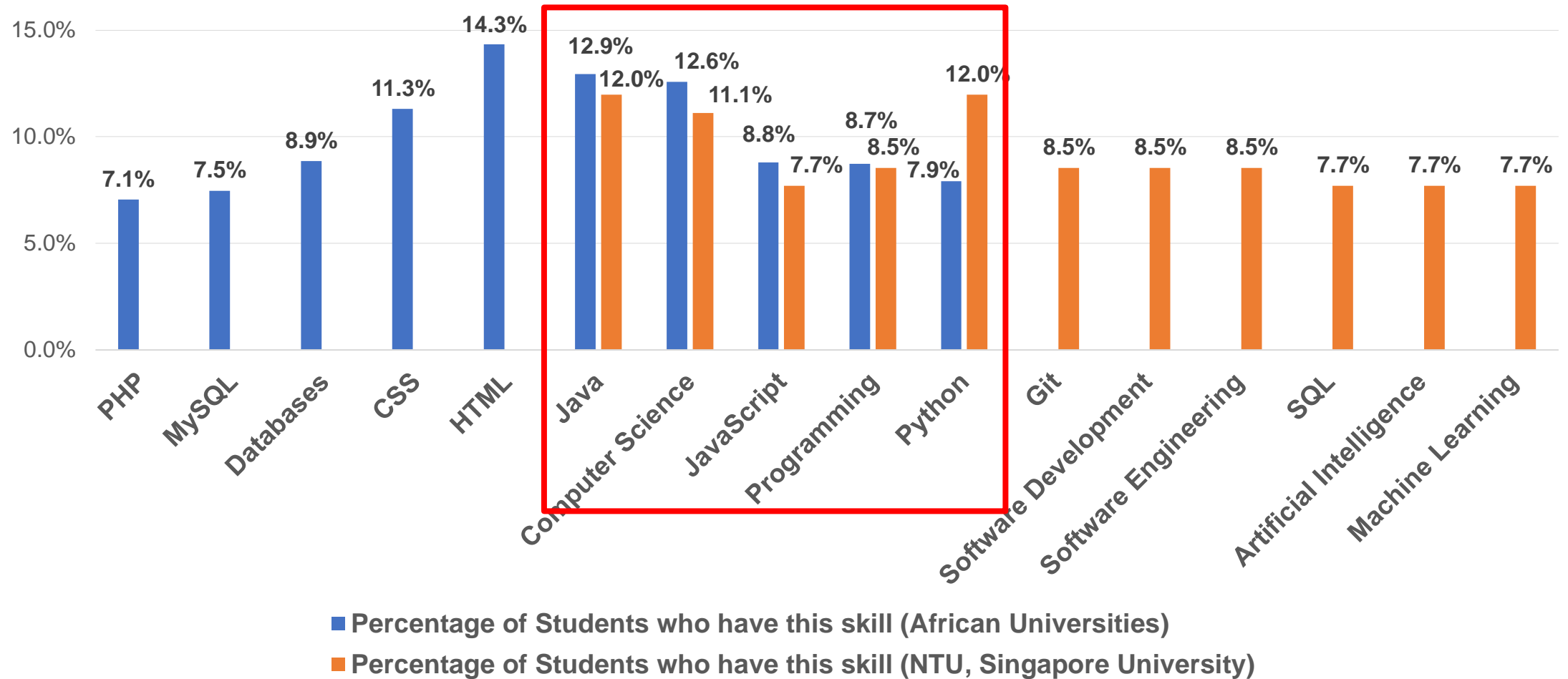
Skill Gap (Skills Name)	Rank
XML	1
Linux	2
Management	3
SQL	4
JavaScript	5
Software Development	6
Java	7
jQuery	8
MySQL	9
Project Management	10

The Skills Gap is calculated by identifying the difference in skills required by the student's "Career of choice" against their "Current self-reported skills set".

"Java", "Javascript", and "MySQL" are self-reported Top Skills among ACE students but their presence in the top Skills Gaps list indicates that a greater number of students are missing these skills that are required by their "Career of choice". In other words, the industry needs more students to be trained in these skills to bridge the skills gap.

The polarization of Technical Skills in the Skills Gap listing is due to the nature of Industry-relevant careers selected by students.

# Key Findings – ACE x Singapore University Data



Moderate overlap, **international consistency of skills**

# Key Findings – Kenya LM data x ACE x Global LM Data

Skill Name	National Data Rank	Skills Gap Rank*	Global Data Rank
Communication	1	107	1
Training	2	131	4
<b>Computers</b>	<b>3</b>	<b>68</b>	<b>91</b>
<b>Research</b>	<b>4</b>	<b>16</b>	<b>12</b>
<b>Leadership</b>	<b>5</b>	<b>13</b>	<b>7</b>
<b>Marketing</b>	<b>6</b>	<b>24</b>	<b>6</b>
English	7	336	3
<b>Databases</b>	<b>8</b>	<b>99</b>	<b>37</b>
Presentation	9	875	8
Access	10	550	16

- The higher the Skills Gap Rank, the larger the Skills Gap for the students

(i.e. Leadership ranked 13 is a more significant Skills Gap than Access ranked 550)

- A total of 1,183 unique skills gaps were identified, with scores above 102 being non-significant

(i.e. non-significant meaning less than 5% of participants identified that skills gap)

- 5 out of 10 Top Industry Skills were significant Skills Gaps, with an emphasis on Soft Skills like Leadership and Marketing

Students are moderately well prepared to enter the Industry