

# CAREER

# SKILLS INTELLIGENCE SYSTEM

*An AI-powered platform that helps every Kenyan learner find their future-proof career path*

# The Problem We're Solving

*Millions of learners enter the workforce without the right guidance.*

## No Career Clarity

Graduates choose careers with no real link to their skills or what employers actually need.

## AI Is Reshaping Every Job

Many roles are being automated. Learners need to know which careers will still exist in 10 years.

## Global Tools Ignore Kenya

International career platforms don't understand CBC, KCSE, or local employer demand.

## Skills Gaps Stay Hidden

Learners don't know what they're missing — or what to study next to become job-ready.

*Without guidance, learners and the Kenyan economy both lose out*

# Our Solution: A 4-Stage AI Pipeline

*One input from the user. Four powerful, personalised outputs.*



**Input: skills + education + career goal → Output: personalised career roadmap in seconds**

# Who Is This For?

## CBC Students

Match your school track to a real career path

## 8-4-4 Graduates

Bridge the legacy curriculum to today's job market

## TVET / Diploma

Find skilled occupations that match your technical training

## University Grads

Discover the best direction for your bachelor's degree

## Postgraduates

Advanced career pivots and deeper specialisation paths

## Professionals

Mid-career transitions and targeted upskilling plans

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*Whether you are a Form 4 leaver in Kisumu or a software engineer in Nairobi looking to pivot, the system meets you exactly where you are.*

**Any Kenyan. Any background. Any goal.**

# How It Works

*Five steps from 'I don't know what to do' to 'Here is my career roadmap.'*

1

## **Tell Us About Yourself**

Share your skills, education level, and career dream in plain language — even in Swahili.

2

## **We Find Your Best Careers**

The AI searches 894 occupations and ranks the top 5 matches for your exact profile.

3

## **See Which Careers Are Future-Proof**

Each career gets an automation risk score and a Future-Proof Score out of 100.

4

## **Discover Your Skills Gaps**

Learn exactly what you're missing and which existing skills are already a strength.

5

## **Get Your Personalised Learning Roadmap**

Receive a structured course plan (Foundation → Advanced) from Coursera, edX and Udemy.

*The entire analysis runs in seconds — powered by AI in the background*

# Which Careers Are Safe From AI?

*Our AI Risk Score rates every career on how likely its tasks are to be automated.*

96%

## LOW RISK

Human skills dominate. Safe career choice today and tomorrow.

3%

## MEDIUM RISK

Some tasks automatable. Upskilling will keep you competitive.

1%

## HIGH RISK

Significant automation exposure. A career pivot is advised.

< 1%

## VERY HIGH RISK

Near-full automation likely in coming years.

Future-Proof Score (0–100) = 40% Job Demand + 40% Low Automation Risk + 20% Salary Signal

# Designed Specifically for Kenya

## 22 CBC Pathway Mappings

Every CBC track — Pure Science, Agriculture, Arts & Sports — mapped directly to matching careers.

## 28 KCSE Subject Mappings

Legacy curriculum subjects linked to internationally recognised O\*NET skill dimensions.

## Swahili-Aware AI

The system understands skills described in Swahili or Kenyan English, not just formal terms.

## Local Demand Signals

119,000+ job postings analysed to reflect what Kenyan and African employers are hiring for.

## Why It Matters

~800K

Form 4 graduates annually

~60%

Youth unemployment rate

0

prior tools with CBC context

894

careers now accessible to all

# What You Actually Receive

*A sample career card — one of five personalised recommendations the system produces.*

## Data Scientist

Technology

High Demand

Low Risk

Future-Proof Score

74 / 100

Skill Match

81%

Education Zone

Zone 4

### Skills Assessment:

Critical Thinking

Strong

Active Learning

Strong

Systems Analysis

Moderate Gap

Programming

Critical Gap

Mathematics

Critical Gap

Data Visualisation

Moderate Gap

# 8,050 Courses. Three World-Class Platforms.

*Every recommended course is matched directly to your specific skill gaps, not just your career title.*

Coursera

**3,404**

courses

*42% of catalogue*

University-level quality. Peer-reviewed.  
Free to audit many courses.

Udemy

**3,672**

courses

*46% of catalogue*

Practical, job-ready courses. Wide  
coverage and affordable pricing.

edX

**974**

courses

*12% of catalogue*

Content from MIT, Harvard and Stanford.  
Rigorous academic foundations.

Learning stages: Foundation (5,555) → Intermediate (2,205) → Advanced (290)

# What's Next

*The foundation is built. Here is where the system grows.*

## Phase 1 — Validate

- Run a user study with 100+ Kenyan learners across all 6 user types
- Collect ratings on career recommendation quality to measure accuracy

## Phase 2 — Expand Data

- Add BrighterMonday and MyJobMag for local Kenyan job demand signals
- Replace static LinkedIn data with live job postings API feeds

## Phase 3 — Deploy

- Package the system as a web API ready for integration into apps
- Build a Swahili-first mobile interface for CBC students

## Phase 4 — Improve

- Calibrate AI risk scores against published automation research
- Add course duration data so users can plan their learning time

# Helping LEARNERS Find Their Future-Proof Career

894 Careers

8,050 Courses

AI Risk Scores

Skills Gap Analysis

Kenya CBC Context

Instant Roadmaps

*Powered by O\*NET · BLS · LinkedIn · Coursera · edX · Udemyl · Kenya MoE*

*Built with Sentence Transformers · scikit-learn · Python*

Career & Skills Intelligence System