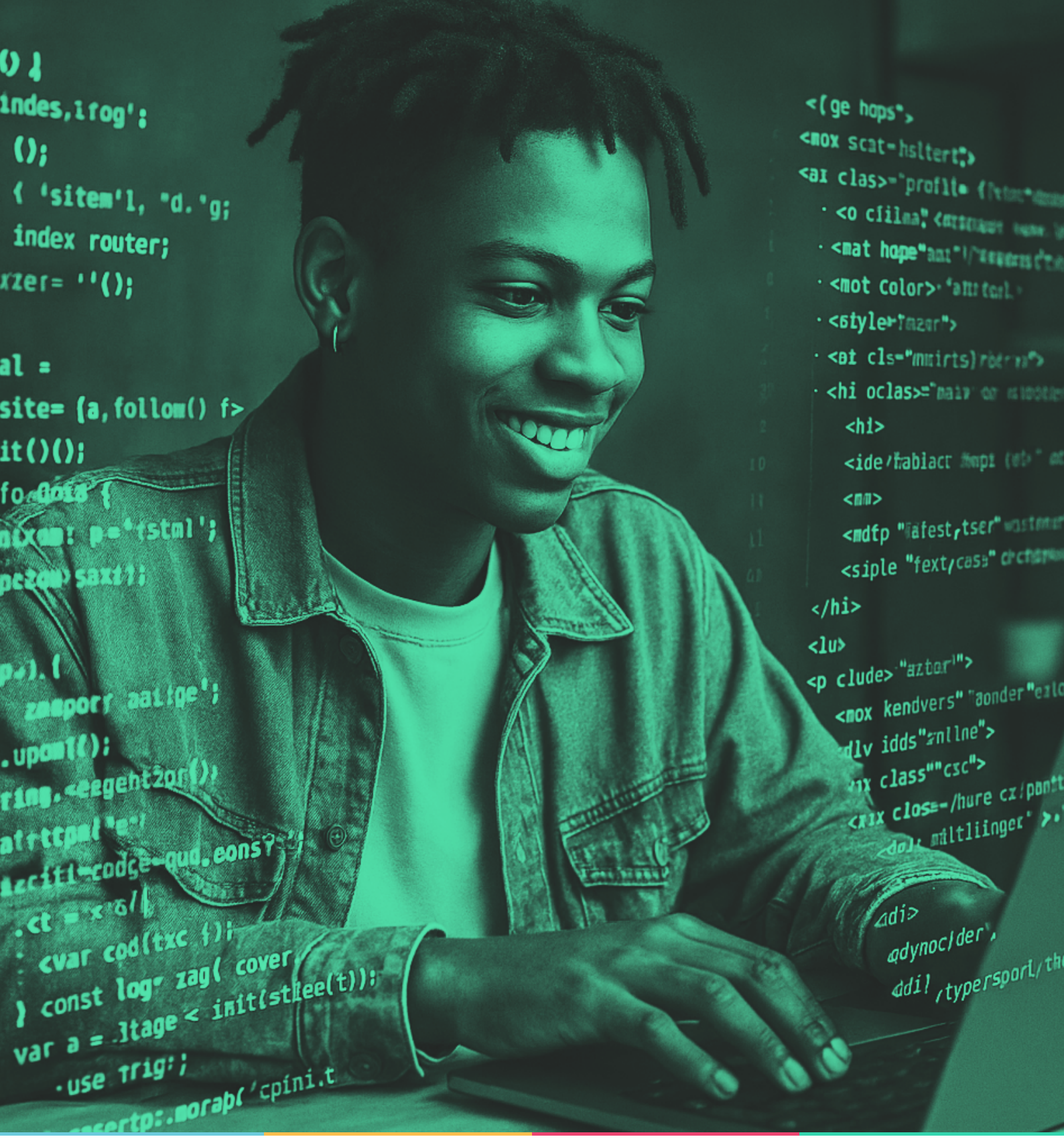


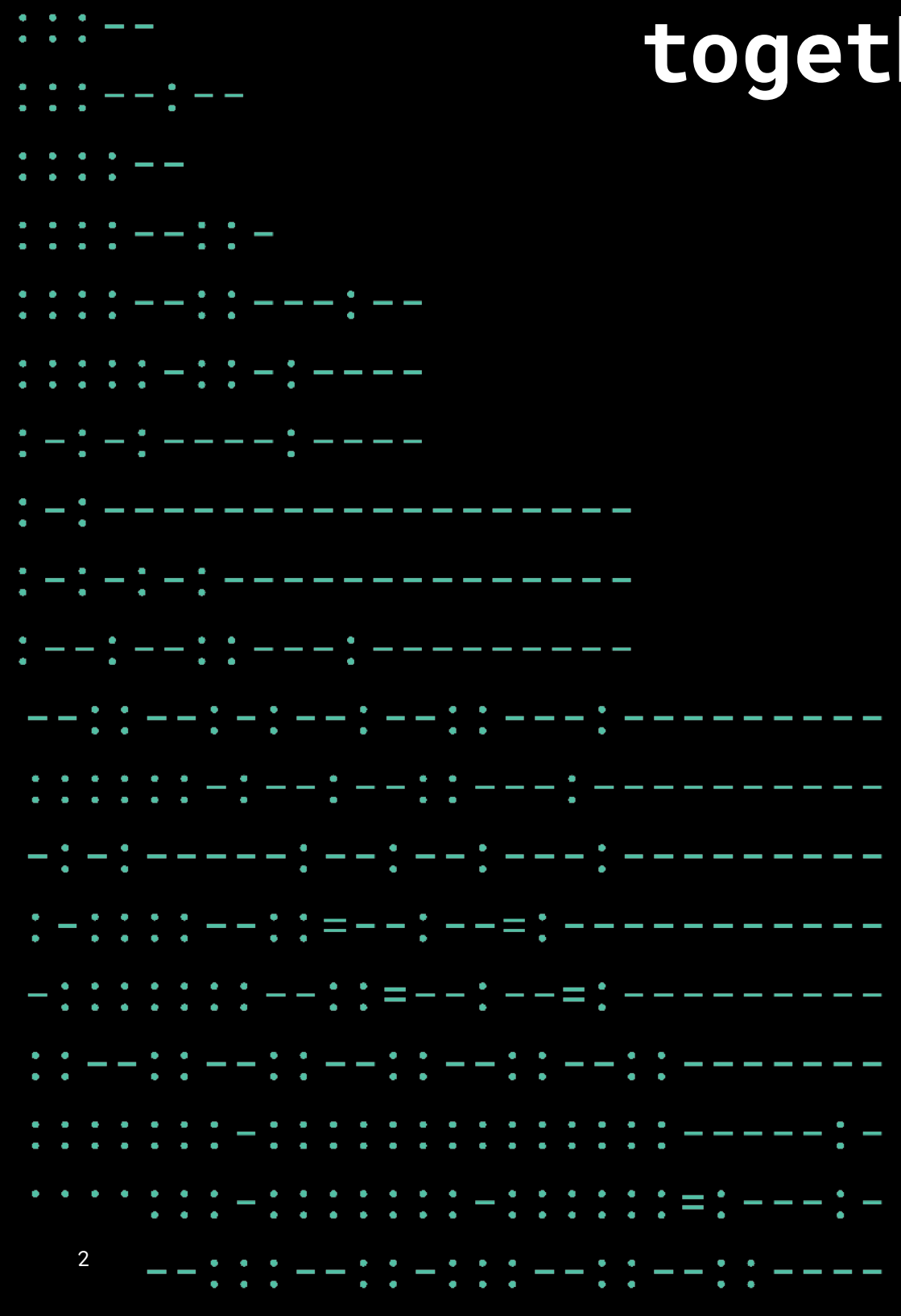
Decoding ICT Demand 2025

Understanding the ICT job market in South Africa

Collective_X

Unleashing digital skills, together

Unleashing digital skills, together



Contents

1.Foreword

The ICT sector is growing at nearly three times the pace of the global economy, making it one of the most dynamic and impactful spaces to work in today. It is exciting, not only because of the rapid advancements in technologies like artificial intelligence, the Internet of Things, cloud computing, and advanced connectivity, but also because of the immense opportunity to disrupt and transform how we learn, live, work, and solve the world's most pressing challenges.

However, this transformation also brings uncertainty around the future of skills and livelihoods; even more so in South Africa where high youth unemployment forms the backdrop against which this disruption is taking place.

Digital jobs in South Africa hold significant potential, not only to create employment opportunities for young people but to provide opportunities that can be truly economically transformative for them. To realise this potential, however, requires a change in how we finance the development of ICT skills, how we deliver those skills, how we recognise that they have been acquired, and how we transition young people into work. And this starts with a better understanding of the landscape of ICT work in South Africa.

This report represents an important first step in that direction. It explores the current landscape to determine what, where, and how many ICT jobs there are; what junior-level opportunities look like and where the zones of opportunity are for young people. And yes, it also begins to consider how AI is reshaping the environment.

Looking forward, we hope to build on this research annually to establish a national barometer that tracks the state of ICT employment in South Africa and how it is changing. Our goal is to equip decision-makers and stakeholders with the insights needed to respond proactively to this everchanging landscape.

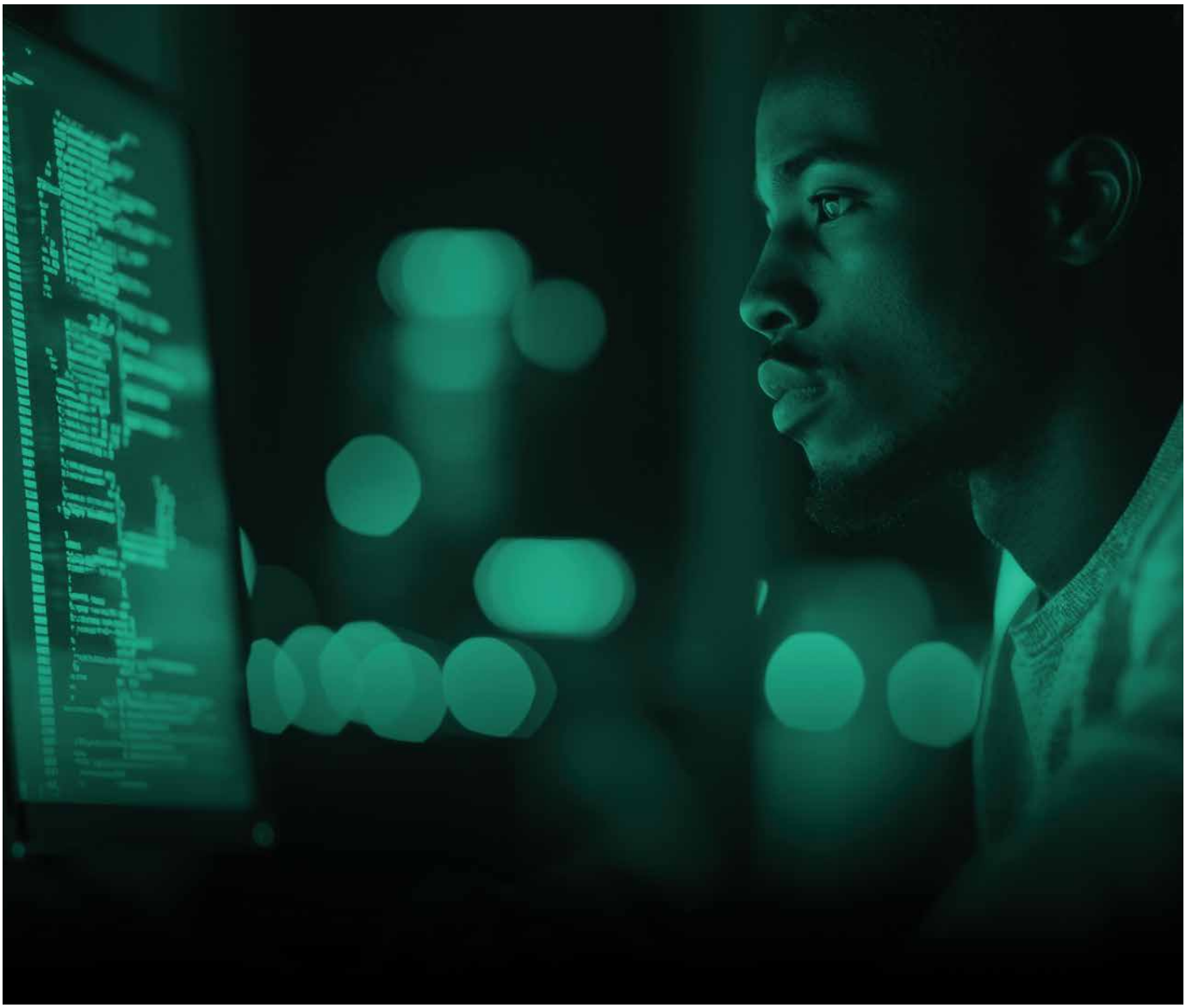
We are deeply grateful to our research partners Pnet and Career Junction, OfferZen and Predictive Insights for their collaboration and contribution. This work would not have been possible without them.

Rob Urquhart

Executive: Evaluation, Impact and Learning Collective X

2.Executive summary

- In 2024, the number of ICT jobs in South Africa is estimated at approximately 318,000, with a vacancy rate of 27.2%. Notably, 35% of these vacancies are at the junior level.
- Although the local ICT sector has contracted over the past year due to both local and global pressures, a compound annual global growth rate of 9.47% for the technology sector is forecast. There is hope that this global momentum will help drive renewed growth in the South African market.
- There are 20 ICT jobs that account for 78% of the vacancies analysed. The most in-demand jobs are software developers, web developers and IT support technicians.
- Software developers, web developers, and IT support technicians are the most in-demand jobs for junior positions as well. Proportionately, however, software developers account for 20% of all junior job vacancies compared to 13% across the broader data set, highlighting a key entry point into the sector.
- Jobs explicitly classified as entirely AI remain limited in the data and are a conundrum. Are jobs with a dedicated AI specialisation an emerging profession? Is AI more often a required skill within existing roles rather than a standalone job function? Does the job market lag the needs on the ground? Or is South Africa a slow adopter? These are questions that need to be explored further.
- The data reveals 'zones of opportunity' for hiring at the junior level. These jobs have relatively high vacancies and a relatively smaller average number of applicants.
- ICT jobs offer transformative economic opportunities for early-career entrants; with monthly pay of roughly R25,000.
- Roles such as IT Support Technicians, Testers, and Systems Administrators may be at risk of automation or displacement due to AI.
- Equipping young people for ICT jobs will require building their competency in AI usage across all ICT jobs.



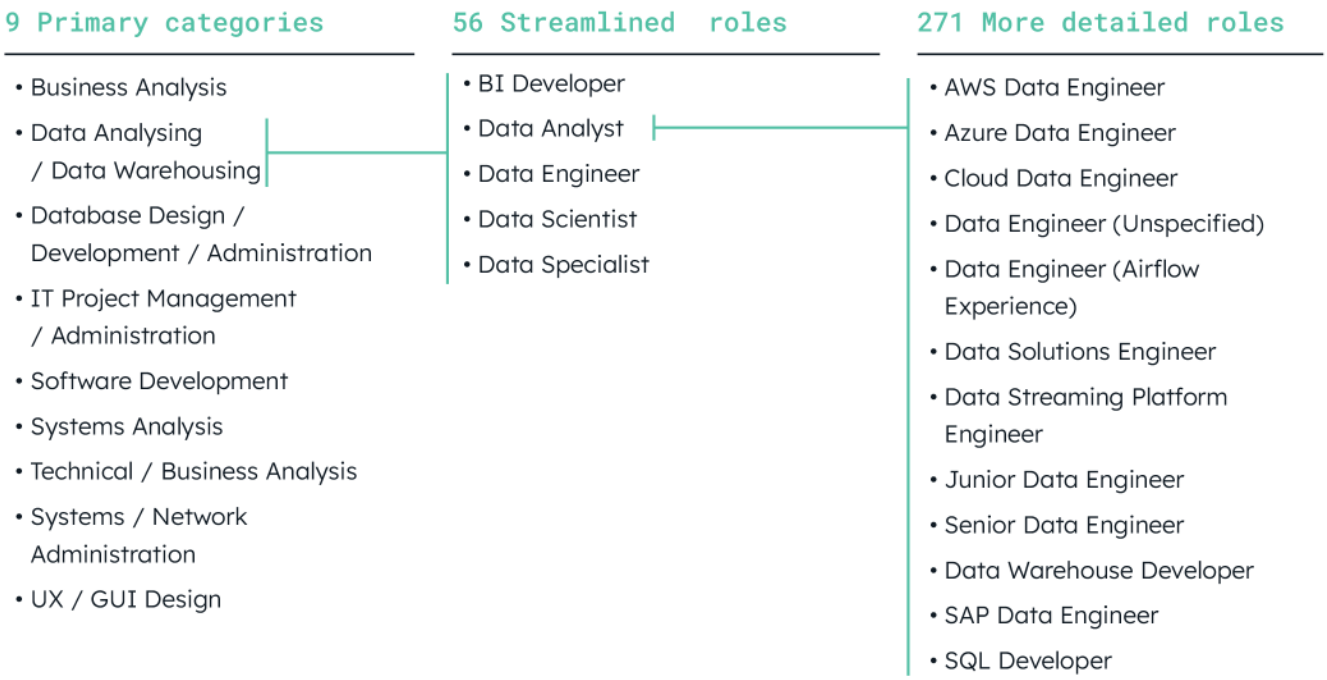
3.Methodology

The data used to complete this report draws on a number of sources.

Anonymised data for the 2024 year was sourced from The Stepstone Group for Pnet and Career Junction. Pnet and Career Junction are estimated to have a 26% local market share of job listings. Data for a total of 266,356 vacancies was provided; of which 30,082 were identified as ICT jobs. Data fields included:

- Publication date
- Job title
- Job sector
- Job subsector
- Region
- Salary offer (where provided)
- Years of experience (where provided)

In order to build the analysis, a dictionary was built from the free-text job titles to construct nine primary job categories which were then broken down into 56 streamlined roles, which were then further cascaded into 271 more detailed roles.



Anonymised data for 1,500 active users was provided by OfferZen. Data fields included:

- Geographic location
- Employment status
- Job title
- Industry
- Size of organisation
- Seniority
- Years of work experience
- Proficiency in programming language
- Proficiency in cloud platform
- Salary range

Data from Pnet and Career Junction provides a picture of employment requirements across ICT jobs, whilst the data from OfferZen offers insights into employment requirements specifically for software developer roles.

The Quarterly Labour Force Survey is a household-based sample survey conducted by Statistics South Africa reviewing labour market activities every three months. Data relating to the Standard Industry Classification Code for Computer and Related Activities was used as an input to establish an estimate of the number of ICT roles in South Africa, together with the MICT SETA's 2023 / 24 estimates of the number of jobs within its coverage.

This report does not claim to offer a definitive or exact representation of the vacancies and size of the local ICT job market. There are two important caveats to note. First is that it is difficult to size, with precision, the number of ICT jobs in South Africa. Public data sets rely on industry classifications that may underestimate the number of ICT jobs by only focussing on the ICT sector. It is generally thought that roughly half of ICT jobs, such as a data scientist working in retail and hospitality, exist outside of the ICT sector boundaries. Additionally, the Quarterly Labour Force Survey uses relatively small sample sizes which means that there can be variation from quarter to quarter.

The second caveat relates to the job vacancy data itself. Job postings are endogenous which means that if a company believes that they will not fill a role, they may choose not to advertise it, or possibly invest in other ways to solve their problem. Similarly, if the job-seeker doesn't believe that they have a chance to secure a particular job, they may not invest in that specific skill, or may not apply for the job at all. Despite this, the size of the datasets provided, coupled with national public data sets, provide a strong foundation for the data-informed insights provided in this report.

4.The demand for ICT skills in South Africa

4.1 Sizing the number of ICT jobs in South Africa

Using the Pnet / Career Junction dataset of 32,082 ICT vacancies, which account for approximately 26% of local market share openings, the overall number of ICT vacancies for 2024 is estimated to be approximately 118,000.

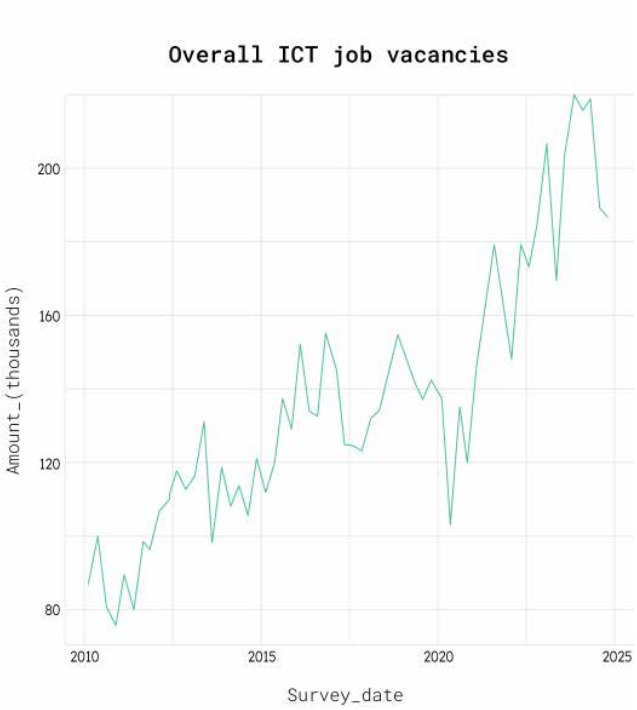
To size the total number of ICT jobs, first the 2024 Quarterly Labour Force Survey was considered, which suggests between 180,000 and 200,000 people are employed in the sector with an additional 100,000[1] programmers in other sectors.

Second the MICT SETA in 2023 / 4 estimated that the number of people in the sector totalled 221,738. The 2022 JCSE-IITPSA ICT Skills Survey finds that more than half of ICT practitioners work outside of the sector, so the MICT SETA number was adjusted accordingly.

By using the Quarterly Labour Force Survey estimate of 300,000 as a lower-bound measure and an adjusted MICT SETA figure to derive an upper-bound measure, a midpoint estimate of 318,000 ICT jobs has been derived.

As the Quarterly Labour Force Survey data indicates, the ICT sector experienced significant growth during Covid which dropped in 2024. Multiple factors contribute; including sluggish economic growth and a global tech slowdown as companies focused on cost cutting.

By using the total number of vacancies derived from the Pnet / Career Junction dataset and the 318,000 figure for the total number of ICT jobs, a vacancy rate of 27.2%[2] has been developed.



Finally, the number of junior-level vacancies has been extrapolated by using the OfferZen dataset to pitch this at about 35%. Of the estimated total 118,000 ICT vacancies, this equates to nearly 41,500 jobs.

1] Statistics South Africa classification code; not representative of software developers only.
2] Not inconsistent with LinkedIn's analysis of 4 million ICT postings at entry-level.

4.2 Snapshot of the landscape

The data from Pnet and Career Junction for 2024 shows that 20 job roles account for 78% of 32,082 ICT vacancies.

The most in-demand roles are software developers[3], web developers, IT support technicians / specialists, business analysts, and Microsoft developers.

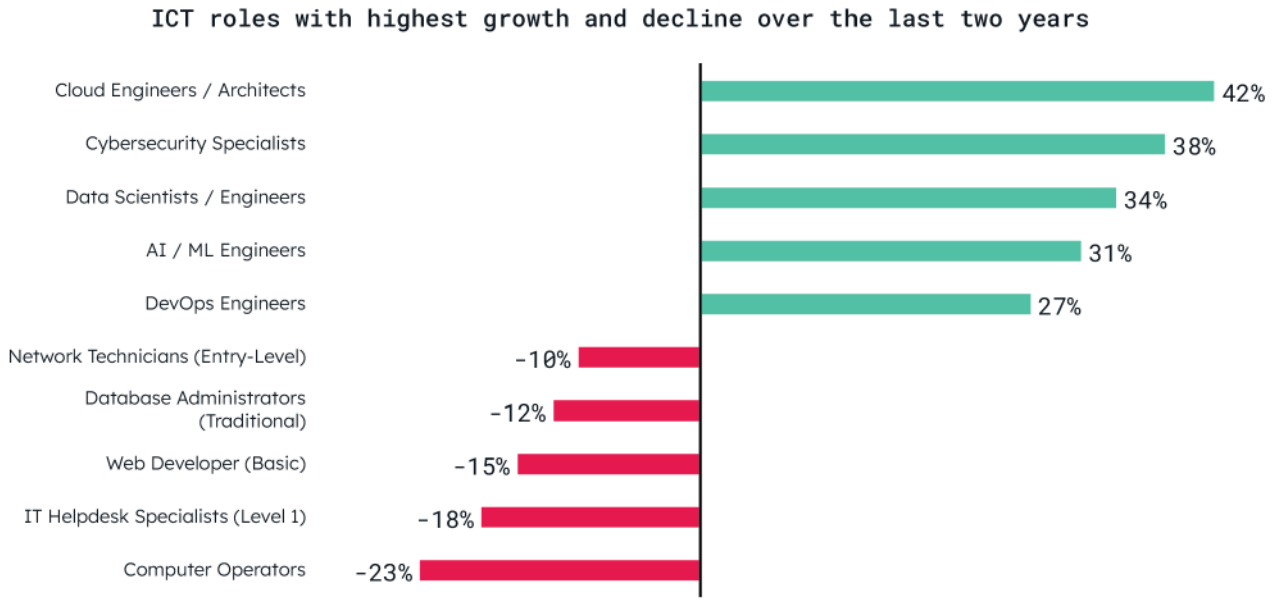
Top 20 job titles treemap - Pnet & Career Junction 2024 (Total: 25 802 jobs)

OfferZen's review of the software development sector in South Africa notes that the sector has contracted since 2023 but still accounts for the largest share of demand in this analysis. Trends such as the broadening of digital access for individuals and organisations, the expansion of software use beyond just tech firms, the increase in the adoption of cloud computing that requires the management of applications off these platforms, and the use of software solutions to enhance efficiencies in digital transformation initiatives all contribute to a sustained demand for these skills.

Jobs that explicitly include AI in their job title are comparatively small in number and are predominantly distributed across data scientists, engineers, and developers. This may reflect the extent to which jobs with a dedicated AI specialisation are an emerging profession, but it may also not reflect the current extent to which experience of AI is a skill required for a job rather than the job itself. The extent to which these AI jobs grow in the future bears monitoring.

3] Specific types of developers have been clustered where there is sufficient size and it has been possible to do so such as Java developers. Software developers in the graphic are all jobs where the job title has only been identified as such in the vacancy data. Language specific developers include jobs that have specified programming languages in the job title, such as Python developers.

Although this report doesn't yet consider year-on-year changes in demand, global trends regarding job growth and decline can be pointers for what might be expected. The demand for cloud engineering (AWS skillsets is in the highest demand, followed by Azure in the Pnet and Career Junction dataset) is driven by the continued adoption of cloud infrastructure in digital transformation strategies. Cybersecurity, data science, AI and machine learning (as organisations prioritise data-driven decision-making), and DevOps engineers also show considerable growth in the last two years. In contrast some jobs of lower complexity (and notably more accessible at the entry-level) are on the decline. Automation and cloud solutions are notable drivers of these shifts.



Synthesis from World economic forum (2024), Gartner (2024), McKinsey global institute (2024), IDC (2024), LinkedIn economic graph (2024)

While global demand for basic web development has decreased with the emergence of no-code or low-code platforms the Pnet and Career Junction dataset reveals that web developers are the second most in-demand job. Some of the factors contributing to the continued demand for this skill may include:

- **High mobile penetration and internet access:** According to ICASA's 2025 State of the ICT Sector Report, smartphone subscriptions grew by 10.36% in the past year, reaching 116.7 million mobile subscriptions. Household internet access now exceeds 78%, driving strong demand for mobile-optimised websites
- **The continued rise of e-commerce post-COVID**: Online shopping habits established during the pandemic have persisted, prompting online retailers to invest in secure, mobile-friendly, and high-performing websites to meet consumer expectations
- **Digital adoptions by SMEs:** Small and medium sized enterprises, that constitute a large proportion of South Africa's economy, continue to grow their online presence, creating the ongoing need for websites, e-commerce platforms and other digital tools

4.3 New and emerging jobs

Some of the jobs that aren't seen, or are emerging in the data, but are growing rapidly are captured in the table below[4]. Their rise can be seen against the backdrop of broader thematic changes in ICT that include relatively new or emerging technologies such as quantum computing, generative AI and the need to harness its benefits balanced with responsibility, maximising complex and big data, and the continued migration to cloud computing.

4] A synthesis of research from World Economic Forum (2024), Gartner (2024), McKinsey global institute (2024), IDC (2024), LinkedIn economic graph (2024), the AI Enabled ICT Workforce Consortium (2025), CompTIA (2024), TechTarget (2023), US Bureau of Labor Statistics (2024).

Role	Description
AI Prompt Engineers	Design, optimise and refine inputs for large language models and generative AI systems
Quantum Computing Specialist	Develop algorithms and applications designed to run on quantum computers
Ethical AI Specialist	Ensure AI systems are developed and deployed ethically, addressing issues of bias, fairness, transparency, and accountability
Extended Reality Developer	Create augmented virtual, and mixed reality experiences for applications ranging from training and education to entertainment and retail
Edge Computing Engineer	Design and implement systems that process data near its origin rather than sending everything to centralised cloud environments
MLops Specialist	Bridge the gap between data science and IT operations, ensuring machine learning models are deployed, monitored and maintained effectively in production environments
Blockchain Developer	Design and implement distributed ledger solutions for supply chain, finance, healthcare, and other sectors
Cloud Security Architect	Design security frameworks specifically for cloud infrastructures
Internet of Things Architect	Design comprehensive Internet of Things solutions that integrate hardware, networking, cloud services, and analytics
Data Fabric Engineer	Design and implement architectures that provide unified data access across diverse sources, locations and formats

4.4 The impact of AI on ICT jobs

The ultimate impact of AI on work and jobs remains uncertain and is evolving rapidly.

However, several factors are beginning to emerge:

- **AI is anticipated to have a significant impact:** The World Economic Forum Future of Jobs Report (2025), estimates that AI and information-processing technology will create 11 million jobs while simultaneously displacing 9 million others
- **Most ICT jobs will be affected by AI:** According to the AI-enabled ICT Workforce Consortium (2025) finds, 91.5% of ICT jobs are expected to experience a moderate or high degree of transformation as a result of AI
- **The train can't be stopped but it can be steered**[5]**:** Anthropic CEO Dario Amodei argues that although AI is currently being used for augmentation, its rapid evolution and sophistication will result in job displacement. There has not been a coordinated and considered plan to respond to AI, which is urgently needed to respond to, and manage, the impact of displacement

The **AI-enabled ICT Workforce Consortium** has conducted a detailed analysis of which ICT jobs, and which specific skills are most likely to be impacted by AI.

Separate from that insight in the report, two illustrative indices are presented here to show how AI-driven **displacement** and **augmentation** could be measured in practical terms.

The displacement index scores and ranks jobs against five criteria to understand their potential for displacement:

- **Task repetitiveness** - how standardised and repetitive tasks are
- **Rules-based decision making** - whether clear and explicit rules can be programmed
- **Data processing intensity** – how much of the role involves structured versus unstructured data (more creative roles will have lower scores)
- **Contextual understanding** – how much nuanced or human context is needed (roles requiring a higher contextual understanding score lower)
- **Creative problem solving** – how much original or creative thinking is required (roles requiring less creative thinking score higher)

5] 'Behind the curtain, a white-collar bloodbath', https://www.axios.com/2025/05/28/ai-jobs-white-collar-unemployment-anthropic .

The transformation index scores and ranks jobs against five criteria to understand the extent to which they might be reshaped by AI:

- **Task augmentation** - the potential for AI to improve human performance of core tasks (roles with high augmentation potential score higher)
- **Decision support** – the extent to which AI could enhance human decision-making
- **Complexity handling** – how AI could help manage increasing complexity in the role
- **Value add** - measures how much the role's value could shift from transactional or technical execution to strategic or creative value-add
- **Learning curve** - how steep the adaptation requirements will be for people in this role (positions requiring significant new skills score 8-10)

Recognising that the impact of AI on job displacement and transformation varies by task, ICT roles listed in the Pnet / CareerJunction dataset have been assessed and scored based on their respective likelihood of displacement and transformation.

Top ten jobs displacement impact

Role	Impact
IT Support Technicians	Vulnerable to standardised troubleshooting procedures, automated help systems and chatbots
Quality Assurance Testers	Advances in automated testing frameworks that can execute test cases more efficiently, consistently and at a greater scale
Database Administrators	Routine database maintenance, performance tuning and backup operations automated through AI powered database management systems
Network Monitoring Technicians	Network monitoring tools with AI capabilities detect anomalies, predict failures and optimise performance
Systems Administrators	Standard system maintenance, patching and performance monitoring handled by AI-powered automation platforms
Report Developers	AI-powered business intelligence tools enable non-technical users to generate complex reports
Data Entry Specialists	Ocular character recognition, computer vision and natural language processing can automate data extraction and entry from multiple sources
Technical Documentation Writers	Language models capable of generating technical documentation from code comments and system specifications
Entry-Level Software Developers	Low-complexity coding tasks and template-based development automated through AI coding assistants and low-code platforms
IT Procurement Specialists	AI-powered procurement systems automate vendor comparison, contract analysis and purchasing recommendations

Top ten jobs transformation impact

Role	Impact
Data Scientists	Leverage AI to automate data preperation and feature engineering while focusing more on problem formulation, model interpretation and business application
Software Developers	Shift from writing every line of code to guiding AI coding assistants, focusing on architecture, specifications and quality assurance
Cybersecurity	Manual threat hunting to orchestrating AI-powered detection systems, focusing on new threat patterns, defense planning, and incident response strategy
UI/UX Designers	Increasingly use AI for generating design variations and prototyping, shifting focus to conceptual innovation, accessibility, emotional design and ethical considerations
Business Intelligence Analysts	From report creation to insights curation, focusing on contextualising AI-generated analytics and translating findings into strategic business recommendations
DevOps Engineers	From manual pipeline management to AI-assisted infrastructure orchestration, focusing on resilience, engineering, chaos testing and platform innovation
Technical Product Managers	Leverage AI for market analysis and feature prioritisation while focusing more on product development, stakeholder alignment and strategic vision
IT Architects	Use AI tools to evaluate design options and compliance requirements, focusing more on innovation, business alignment and managing increasingly complex technology ecosystems
Digital Marketers	Shift from campaign execution to strategy as AI manages optimisation; focusing on brand consistency, creative direction and cross-channel integration
Database Engineers	From query optimisation to data architecture innovation as AI handles performance tuning, focusing on data governance, integration strategy and novel storage paradigms

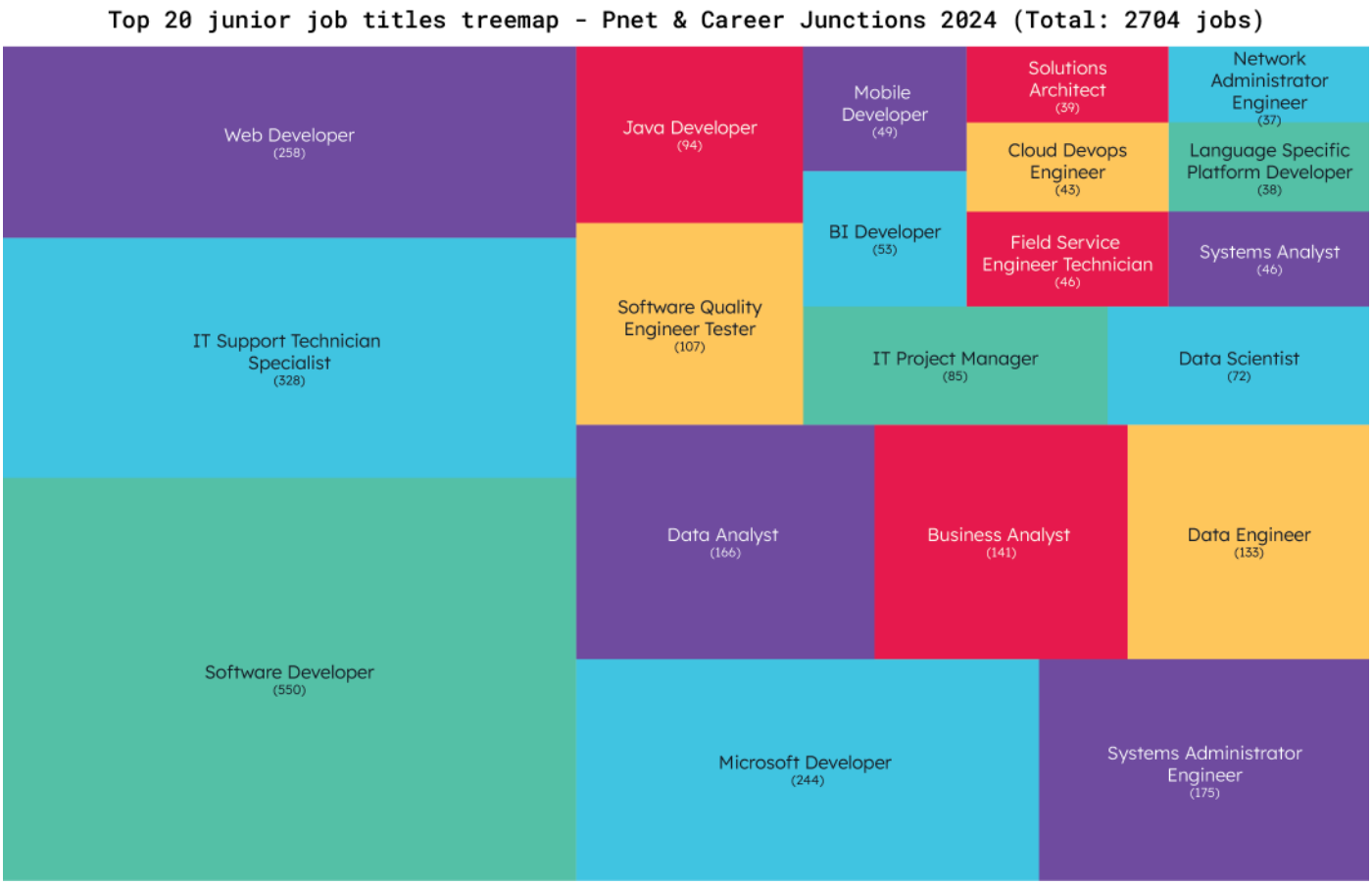
Jobs with standardised processes (such as support technicians and testers) are more vulnerable to displacement as workflows may be easier to code into AI systems.

From a transformation perspective, job requirements are shifting from the 'doing' tasks to engaging in activities like orchestration, curation, innovation and alignment. As AI automates tasks and transforms ICT jobs and ICT workers to do less repetitive work[6], 'soft' skills, creativity, and complex problem-solving[7] become more important.

6] LinkedIn Future of Work Report, 'AI at work', 2023.
7] OfferZen, 'The 2024 AI skills and impact report', 2024.

5.The junior job market for ICT skills in South Africa

The junior ICT[8] job market follows a very similar pattern to overall demand trends, with software developers, IT support technicians / specialists, web developers, system administrators, and data analysts ranking as the top five most in-demand roles for junior-level skills. Notably, some junior roles offer a higher proportion of vacancies in comparison to the overall dataset. For example, junior software developers account for proportionally more of the junior jobs on offer (20% versus 13% in the overall sample), as do IT support technicians (12% versus 8%), and Microsoft developers (9% versus 5.7%).



It's not just the size of the jobs pool that points to where the employment of youth might focus, but an appreciation of what proportion of those roles are at the junior level.

For example, while there were 2,814 web developer jobs listed in the Pnet / Career Junction dataset, only 258 (9.2%) were identified as junior roles. In contrast, a higher proportion of junior roles was found in other fields: 20% of cloud developer, 18% of AI / ML / robotics, 17% of software developer, and 15% of data science jobs were junior level.

One explanation for this could be that overall growth in these fields is leading to higher demand across all levels of experience and supply may not be keeping up with demand; creating shortages at intermediate- and senior-levels. This drives up the cost of experienced hires, making the recruitment of more junior candidates more attractive.

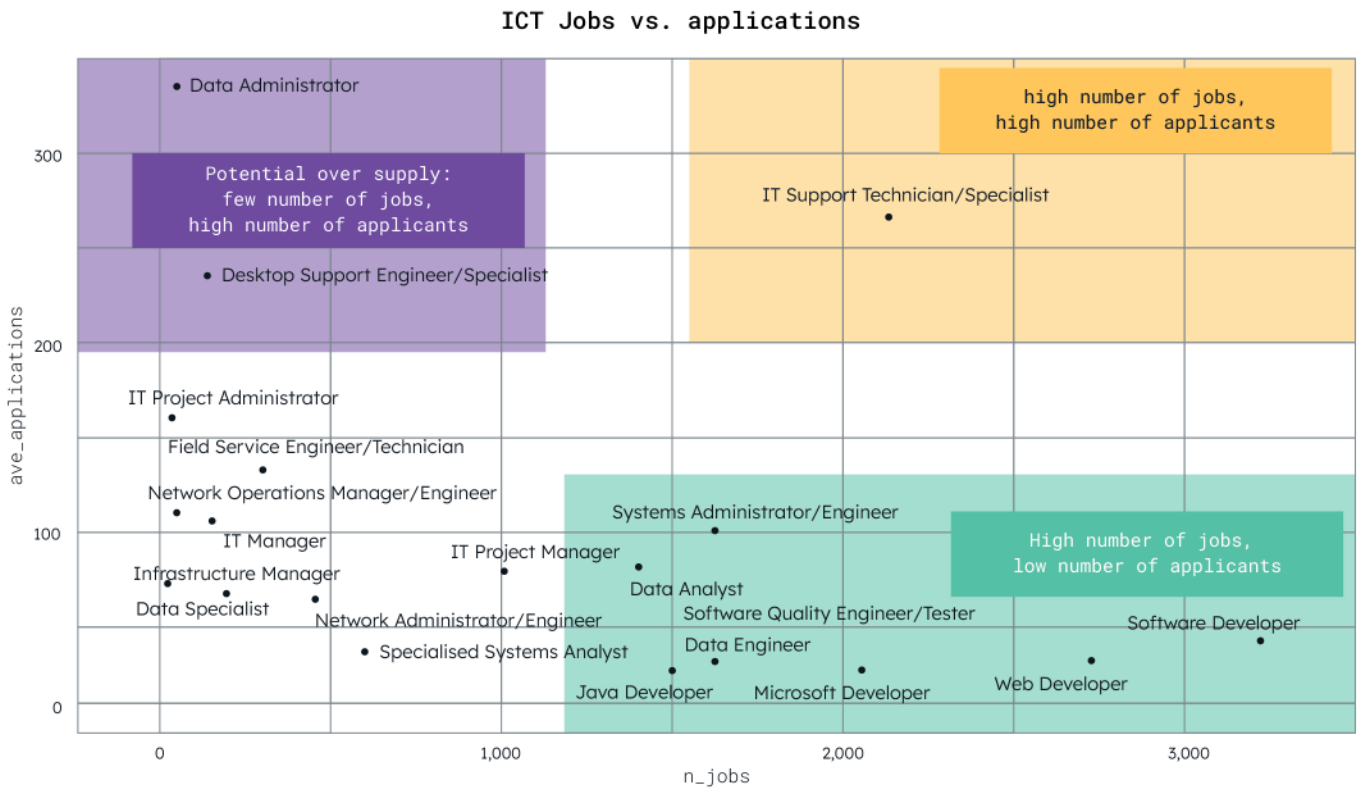
5.1 The zone of opportunity for junior ICT job-seekers

Another way to understand where the opportunities for early ICT career entrants might be, is to identify the zones of opportunity.

By plotting the average number of applications per job against the number of jobs advertised in the Pnet / Career Junction dataset, it is possible to identify jobs where there are many opportunities but on average fewer applications.

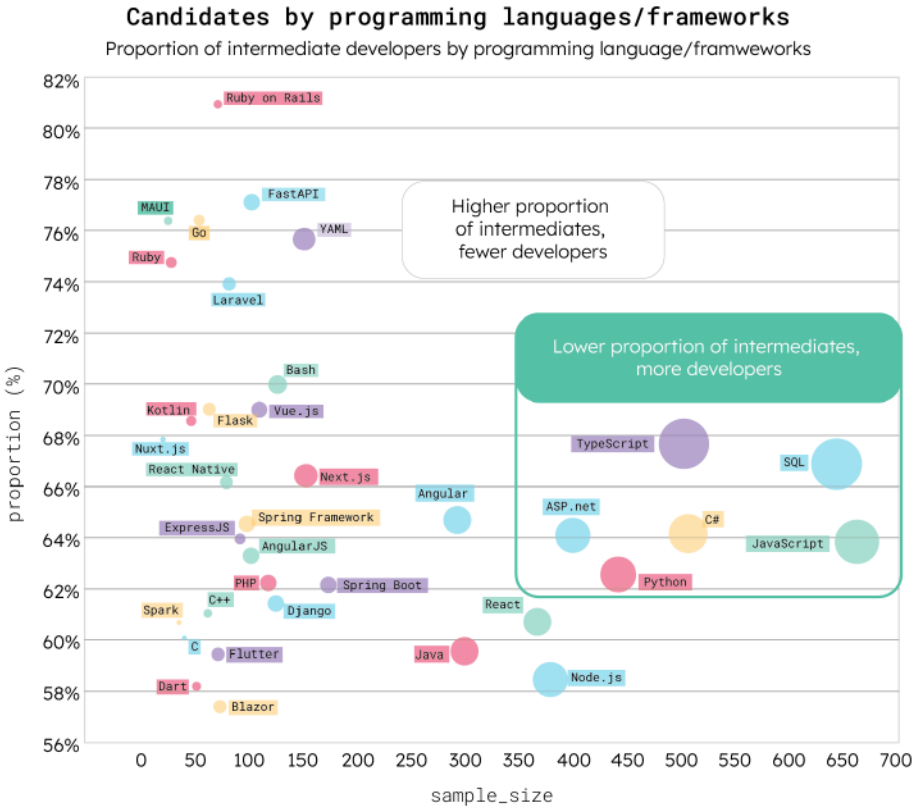
8] Not all job titles in the dataset specified the level of seniority and we expect that the data presented here is under-representative of the actual number of roles that are junior-level. We inferred whether a job was junior either by reference to it as such in the job title, the average salary, or years' of experience required (if any of these were provided in the data).

Software developers, web developers, and Microsoft developers all occupy this sweet spot. Although IT support technicians are served many job opportunities, there are many applications too, suggesting a competitive market for these skills. Data administrators and desktop support specialists are potentially in over-supply, with fewer opportunities available and many more applicants on average.



Using the OfferZen data, similar zones of opportunity can be identified, specifically for software developers and language-specific proficiency. Instead of looking at the average number of applications, this analysis used the proportion of candidates at the intermediate level as an indicator.

Languages such as C#, Python, TypeScript and JavaScript show a high number of developers with a lower proportion at the intermediate level, indicating that these are more absorptive of junior or entry-level talent[9]. Languages like Ruby on Rails are more niche with a smaller and more experienced base of developers, meaning there are fewer opportunities at the entry level.



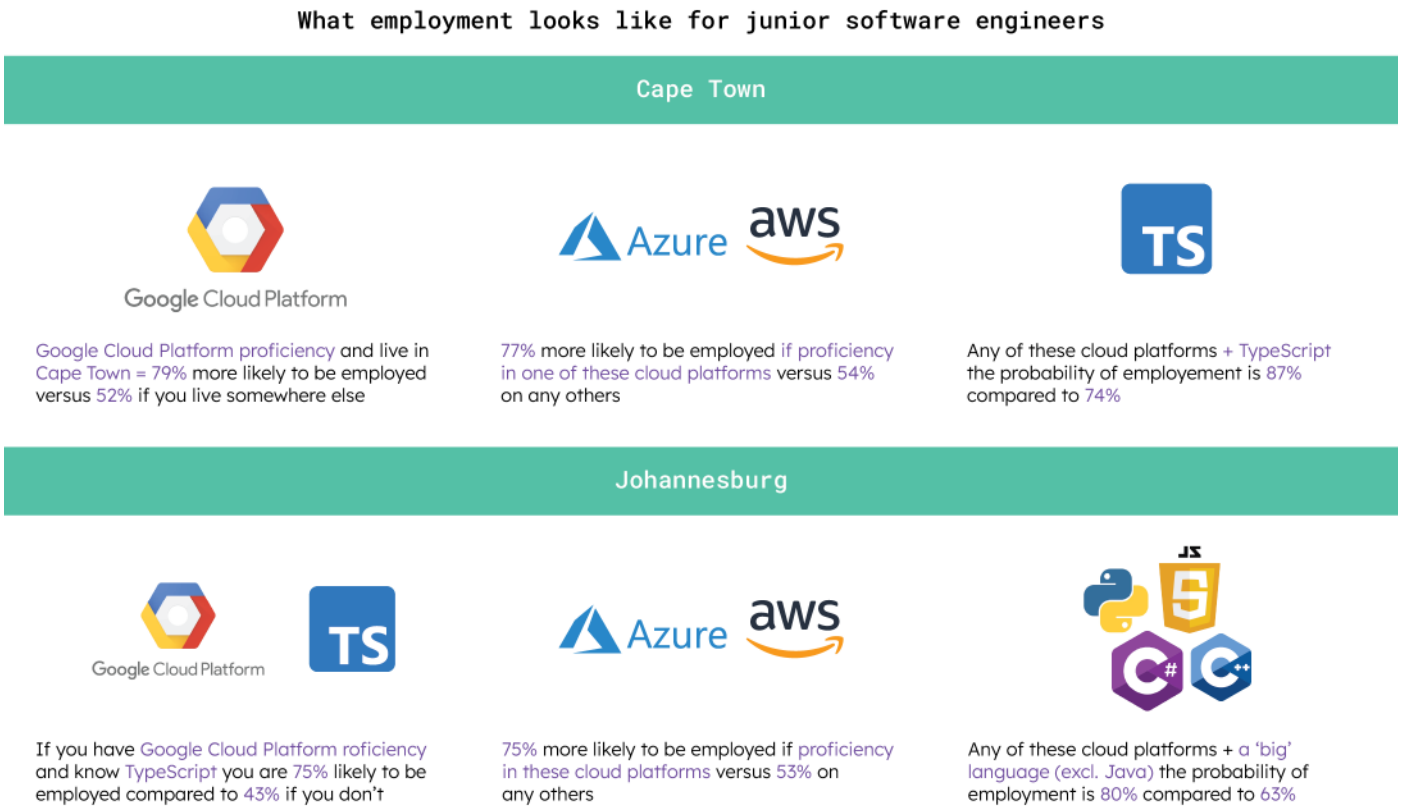
9] These are also the most used languages in South Africa in 2025, according to OfferZen's 2025 State of the Software Developer Nation report.

5.2 Profile of success for junior software developers

The OfferZen dataset offers an insight into what success (i.e. employment) looks like for junior software developers in particular.

Proficiency in cloud platforms, particularly Azure, AWS, and Google Cloud, increases the probability of finding employment. Proficiency in TypeScript further enhances employability.

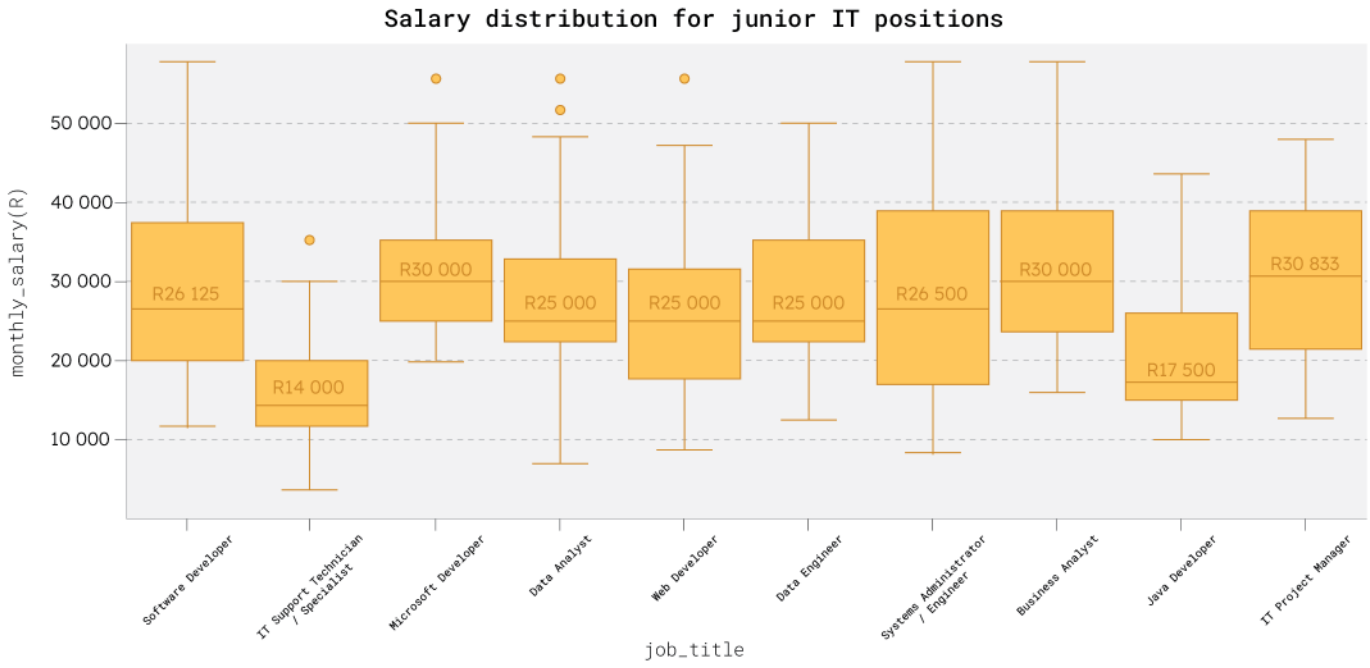
Google's Cloud Platform is a compelling tool for start-ups due to its generous free tier, extensive start-up programmes, and cost-effectiveness. These smaller companies that can't compete with larger firms for higher-priced and more experienced developers, would be more inclined to hire junior developers.TypeScript is open-source and well-regarded as a generalist language, and a progression into JavaScript. It originates from, and is well integrated with, the Microsoft environment. The ubiquitous use of Microsoft today (and as in seen in the Pnet / Career Junction dataset in the demand for Microsoft developers) can explain why it is a success factor for junior developers entering the market.

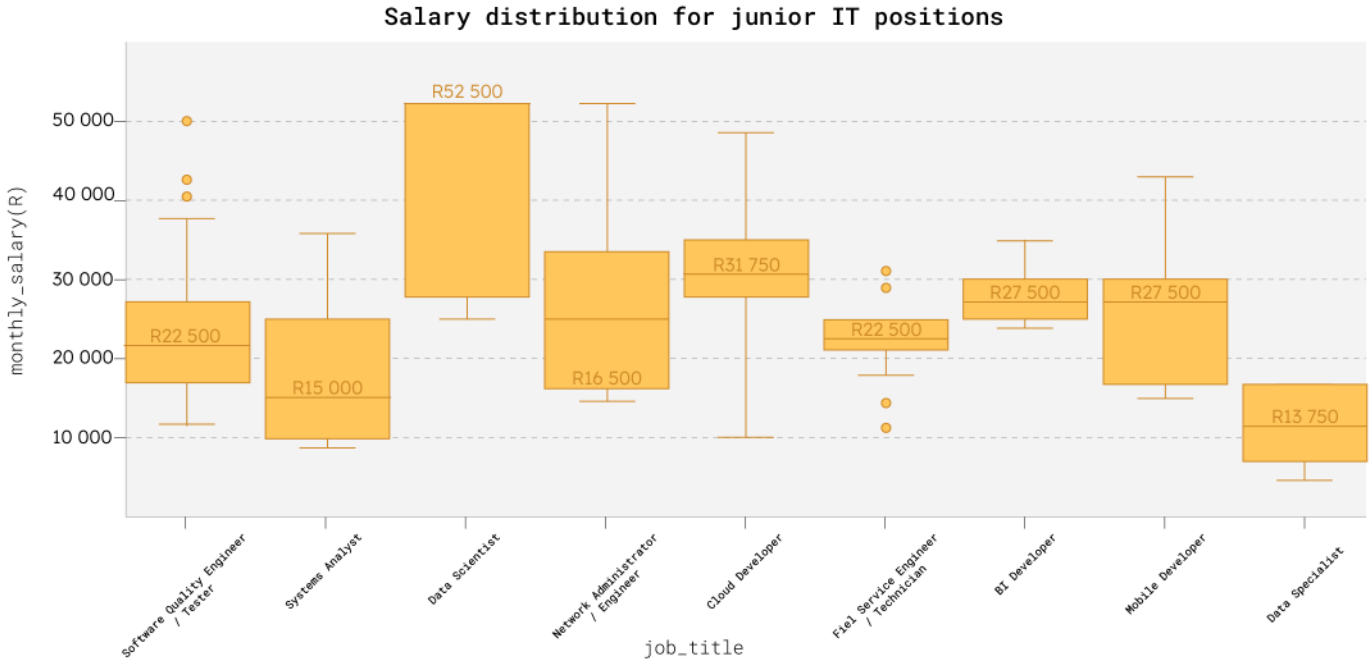


5.3 Remuneration for junior ICT workers

The Pnet / Career Junction dataset provides limited public information about salaries, therefore the sample sizes for these monthly salary ranges are small and would most likely adjust downwards with more data[10]; particularly if small and medium-sized firms who offer more modest salaries are under-represented in the data.

Nevertheless, the data suggests that across the spectrum of jobs a junior ICT professional could expect to earn on average about R25,000 per month. This figure would adjust according to the specifics of the job, industry, location geography and employer size. Comparative to junior roles in other sectors, salaries for juniors in the ICT sector are good and can be economically transformative.





10] Anecdotally for example, it is more reasonable for junior data scientists to earn between R28,000 and R32,000 per month.

For software developers, OfferZen's **2025 State of the Software Developer Nation** report finds that junior staff with 0-2 years of experience earn on average the following monthly salary according to their proficiency:

Average monthly income of junior software developers by language

Language	Monthly Salary
Ruby	R28,000
PHP	R26,000
Python	R24,000
Go	R24,000
SQL	R22,000
Java	R22,000
Typescript	R21,000
C#	R21,000
JavaScript	R21,000
Kotlin	R16,000

Software developers in Cape Town earn more than other locations in South Africa, but those salaries command a premium given the higher cost of living.

5.4 Is AI breaking the bottom rung of the career ladder?

The earlier analysis of job opportunities for junior ICT workers highlights several roles, such as IT support technicians, software testers, systems administrators, and basic software developers[11], that are the most at risk of displacement by AI.

Historically, entry-level work in jobs such as these has acted as a stepping stone to learning skills under the mentorship and guidance of more experienced professionals[12]. The replacement of tasks traditionally performed by junior roles with AI could reinforce the challenge that young people already face in gaining the work experience much-needed to get a foothold in the workplace.

But this isn't necessarily a foregone conclusion. In fact, inexperienced workers could benefit from generative AI if it helps them learn faster[13]. Additionally, as AI adoption in the workplace broadens, junior workers may be given greater responsibilities[14]. Nevertheless, a lack of AI skills is going to become an employment barrier, especially as more employers view these capabilities as essential. The AI Enabled ICT Workforce Consortium identifies three essential foundational AI skills[15] necessary for junior ICT work-seekers to be skilled in, to prevent the bottom rung of the career ladder from breaking.

Foundational AI skills

AI literacy

- Critically select and use AI tools for the task
- Responsible use of AI tools
- Understand ethical aspects of AI

Data fundamentals

- Data science principles & techniques
- Data classification
- Basic analytics
- Story-telling with data

Prompt engineering

- How to interact with AI systems with prompts
- Prompting techniques
- Potential and limitations of the prompting engineering

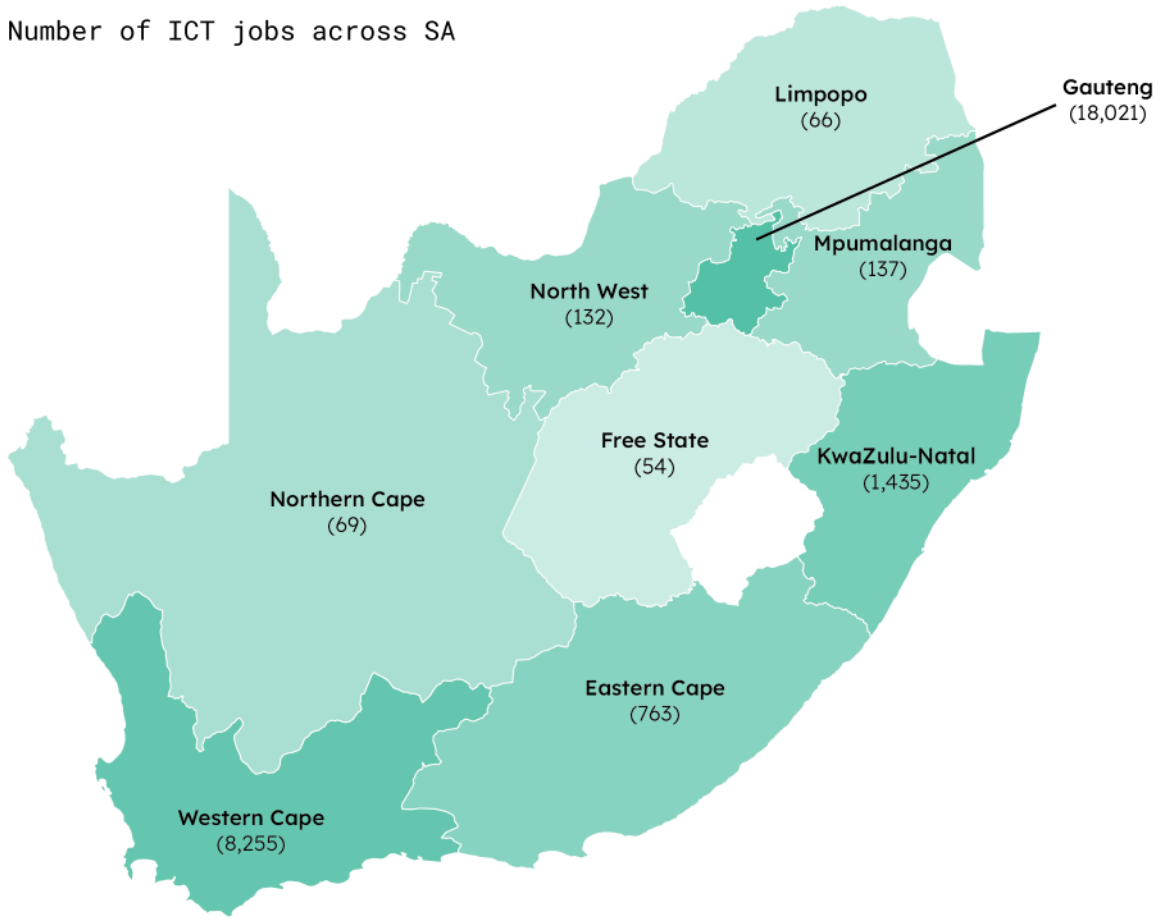
11] For software development for example, firms can now 'outsource' basic scripts or routine and competitive coding tasks to an AI tool such as Co Pilot instead of using a junior software developer.
12] Aneesh Raman, 'I'm a LinkedIn executive. I see the bottom rung of the career ladder breaking', New York Times, 19 May 2025.
13] Research from Brynjolfsson, E. Li, D. Raymond, L. 'Generative AI at work', MIT Sloan, November, 2024 finds that inexperienced contact centre workers boosted their productivity by 14% compared to more experienced workers whose productivity didn't change.
14] Microsoft Work Trend Annual Index Report, 2024, 'AI at work - now comes the hard part.'
15] OfferZen's '2024 AI skills and impact data report' is similar in reflecting the sentiment of what software developers believed were essential AI skills: understanding of AI principles, prompt engineering, and proficiency in AI languages, tools, and libraries.

6.Geography

6.1. ICT jobs across South Africa

The Pnet / Career Junction dataset illustrates that jobs are clustered around the major economic hubs with over double the number of opportunities in Gauteng than in the Western Cape with 18,021 and 8,255 opportunities respectively.

Where it has been specified, remote / hybrid work doesn't feature prominently, with less than 7% of advertised jobs offering this working model, of which only 8% are available for juniors.



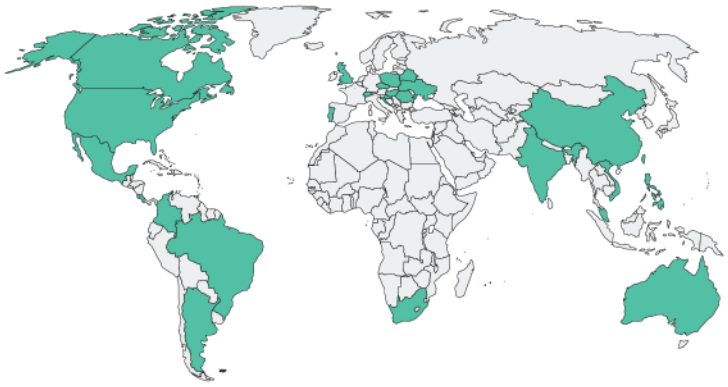
In looking at the OfferZen dataset for software developers only, junior developers have a higher likelihood of finding employment in Cape Town / Stellenbosch (78%) versus Johannesburg / Pretoria (69%) but there are 38% more junior developers employed in Johannesburg in comparison to Cape Town. The length of time to find a job[16] is also shorter for junior developers in the Cape Town / Stellenbosch area; just over seven months as opposed to just over eight months in Johannesburg / Pretoria. The growth of Cape Town as a tech hub especially for start-ups could be a contributing factor and an indication of the accompanying demand for skills.

16] The person doesn't have to be unemployed when looking for a job.

6.2 Offshoring

How does South Africa compare against other countries as an offshoring destination? For ICT work to be truly transformative in absorbing young workers at scale in South Africa, it needs to do more than just address unmet demand and needs to attract work from other countries. While cost is just one consideration in offshoring, the Pnet / Career Junction dataset provides some data on hourly remuneration rates[17]. When converting to US dollars, these rates give a rudimentary sense of how South Africa compares to other countries[18] which is generally competitive.

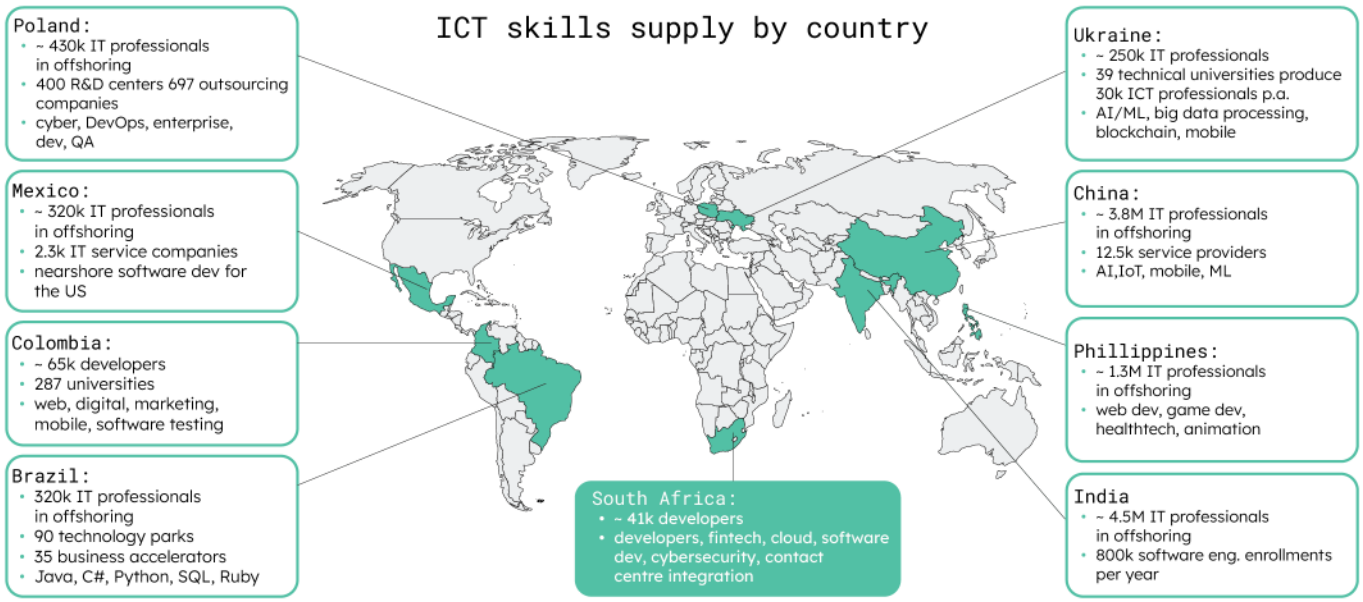
Worldwide hourly renumeration rates in Dollars



South Africa	$11 - $80	Switzerland	$70 - $150
Canada	$50 - $120	Czech Republic	$25 - $80
United States	$50 - $200	Poland	$50 - $90
Mexico	$35 - $65	Belarus	$20 - $60
Costa Rica	$35 - $65	Ukraine	$30 - $60
Colombia	$20 - $40	Croatia	$40 - $70
Brazil	$15 - $50	Portugal	$35 - $65
Argentina	$25 - $40	Hungary	$20 - $60
China	$25 - $50	Romania	$25 - $50
Taiwan	$25 - $50	Portugal	$35 - $65
Phillippines	$15 - $45	UK	$70 - $150
Singapore	$25 - $55	Australia	$70 - $150
Vietnam	$15 - $40	India	$15 - $50

However, in order to compete on the global stage, South Africa needs to have the supply of skills to do so. If South Africa had a pool of approximately 41,000 software developers, this would be a significantly smaller number than the leading ICT offshoring markets. Even though some economies and populations are larger, like Columbia which is South Africa's closest match, they have a stronger talent pipeline.

ICT skills supply by country



17] Hourly rate range for n=206 software development jobs. Lowest = tester. Highest = SAP developer.
18] '24 best offshore software development countries in 2025', https://codevian.com/blog/best-offshore-software-development-countries/.

7.The Collective X motivation

The results from this report highlight both the potential and the challenges for absorbing young people into South Africa's ICT jobs. There is demand for ICT skills which currently outstrips supply. The demand for ICT skills will continue to evolve but it will constantly be disrupted by shifts in technology.

There has never been a better time than the present to develop these new skills and competencies in our young people if we are to reap a digital employment dividend. But realising the opportunities require a coordinated ecosystem approach involving employers, training providers and other skilling institutions, government, and financing systems.

Putting young people into entry-level ICT jobs

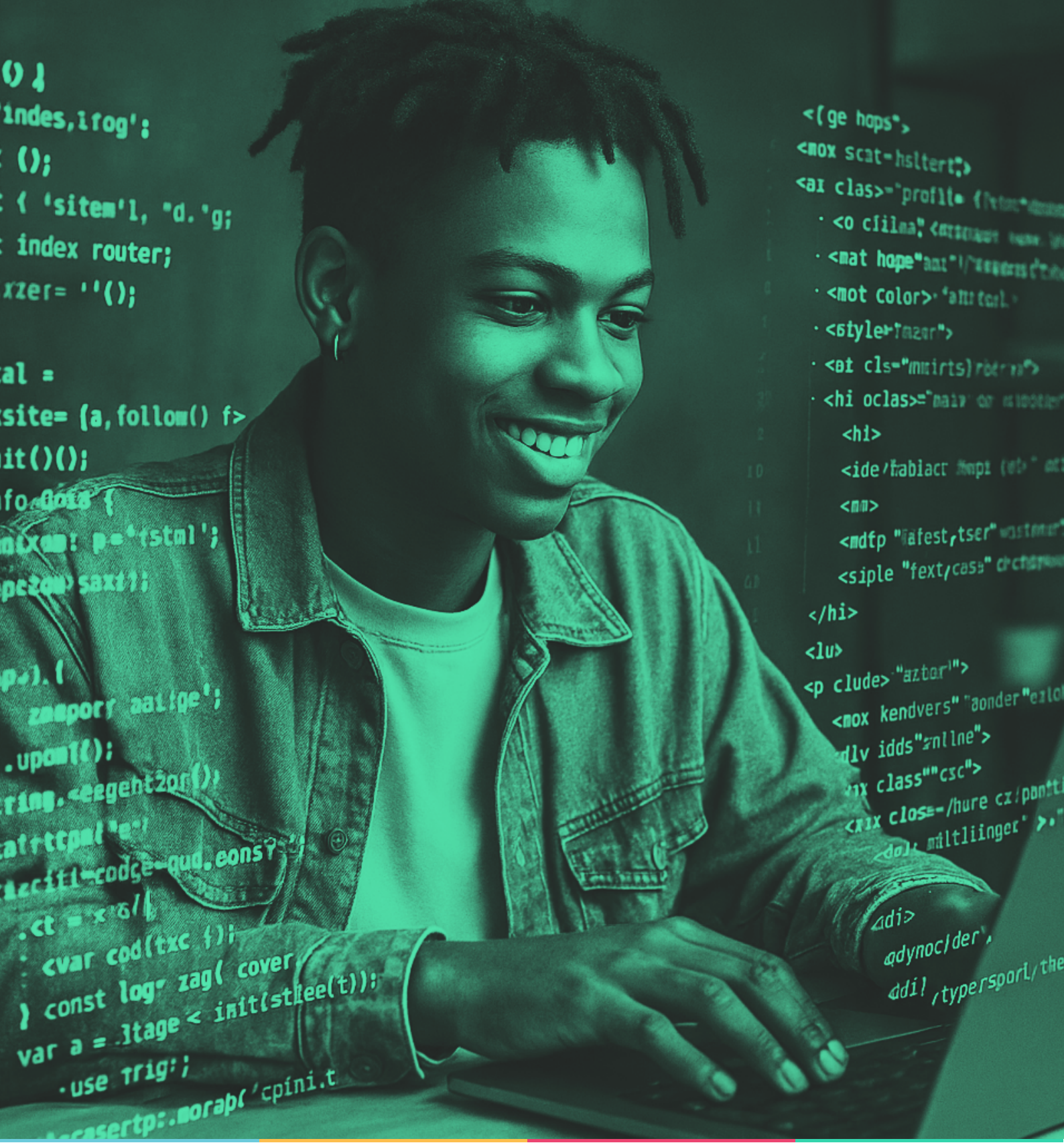
Employers must find ways to put young people at the front of the queue for entry-level ICT jobs. This includes the redesign of roles and expectations with an understanding of how AI can be used to amplify the roles and responsibilities of entry-level roles, putting 'more power into the hands of workers in terms of the way the job gets done'[19]

Training providers and other skilling institutions must build training of AI fundamentals as a pre-requisite for all jobs. New innovative training programmes should consider the shortest route to competence and integrate meaningful real work experience as a central feature

Government needs to recognise and support skilling that is agile and responsive to an environment that is constantly being disrupted. Skills financing should be directly tied to employment outcomes and driven by the skills demand needs of employers

Young people must have a clear line of sight to work opportunities. They need to be able to find and access new, emerging and in-demand jobs and know what skills they need to grab these opportunities now

19] Microsoft Work Trends Annual Report, 'AI at work – now comes the hard part', 2024.



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