Orcapod

Skills That Will Keep You Awake In 2024

Futureproof your business by creating a workforce with all the skills that 2024 will demand.



Keep an eye on the future

In the ever-evolving landscape of the business world, as technology advances and industries adapt, the emergence of new skills is inevitable. Businesses need to be ready.

As of 2023, approximately 80% of current job roles are expected to require skills that will persist into 2024, emphasising the importance of existing competencies. Nevertheless, an estimated 30% of jobs in 2024 are anticipated to demand skills that the world has yet to witness. These skills are currently emerging due to ongoing advancements and industry shifts. (Source: Forbes)

Looking ahead to 2024: Factors such as machines replacing humans, the demand for automation, the surge in digital transformation, the widespread adoption of remote work, and the newfound cybersecurity challenges underscore the critical importance of future-oriented skills. Companies that prioritise recruiting employees with these skills are better positioned to adapt and thrive in the future of work.



We are here to sculpt the path to your future! This material explores skills that will keep you awake in 2024. The prized, the preferred, the highly coveted. The ones you can't afford to sleep over.



Application Development and Management

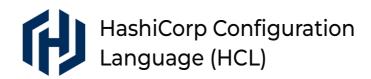
By 2024, conventional applications are predicted to fall short in meeting the dynamic technological needs. Compared to off-the-shelf apps, custom app development would provide the flexibility and scalability necessary to create bespoke solutions that would align with futuristic business goals, leading to increased demand.

Roles such as Full Stack Developers, Frontend Developers, Backend Developers (PHP, Node, Python Full Stack), Moodle Developer, Site Reliability Engineer, and Blockchain Developer are hot sellers in 2023 and will remain relevant in 2024.

Skills that 2023 will carry with it into 2024

HTML, CSS, JavaScript, React.js, Node.js, Express.js, MongoDB, GitHub, Ext.JS, Kendo UI, Angular, React, Vue.js, Java, .Net, Python, Ruby, Golang, Scala







Testing and Validation

In 2024, the escalating talent shortage and skills gap are expected to prompt an even deeper integration of AI and ML into the testing process. Emerging technology trends will drive the demand for test case automation. Robotic Process Automation (RPA bots) is anticipated to become a specialised area for automated testing. The world will be more interconnected than ever, elevating the need for blockchain technology and heightened resilience against evolving cyber threats.

Roles such as **Quality Assurance Manager**, **Automation Tester**, **Performance Tester**, **and Database Tester** are hot sellers in 2023 and will remain relevant in 2024.

Skills that 2023 will carry with it into 2024

SQL, Perl, Python, Selenium, Cucumber, and Appium, Volume testing, Stress Testing, Endurance Testing, Spike Testing, Load Testing & Scalability, Functional Testing, Non-functional Testing, Structural Testing



QAOps



AI/ML Testing



Blockchain Testing



Cybersecurity
Testing



Mobile Automation Testing

Data Engineering and Analytics

Data is the future's playlist — the life of all parties of tomorrow.

Advancements in data analytics technology will significantly impact how we access, understand, and manage data. By integrating natural language processing (NLP) and automated insights, extracting usable information from a data dump will be child's play, even for non-technical users. At tools will play a crucial role in ensuring regulatory compliance and maintaining customer trust. Governance and ethics will take the top spot.

Moving into 2024, dealing with data will be a new ball game altogether. Forget crystal balls; the real fortune-tellers will be those who know how to read data..



of organisations across diverse industries are predicted to rely on data-driven decision-making. (Source: Gilisium)

Roles such as **Data Engineer**, **Data Visualisation Engineer**, **Hadoop Developer**, **and Data Analyst** are hot sellers in 2023 and will remain relevant in 2024.

Skills that 2023 will carry with it into 2024

Multi-Cloud computing, Programming (Java, C#, C++, Go, Ruby, Rust, Python, Scala, Spark), Amazon Glue, DataBricks, SQL, Data Lakes, Snowflakes, NoSQL, DevOps, Hyper Automation, Azure Data Factory, AWS Glue, Kafka, ML





Kafka & Cloud Based AWS Glue



Azure Data Factory & Azure HDInsight



Google's Looker, Amazon's Athena & QuickSight



Data Governance



Infrastructure Management and Support

In 2024, a promising era awaits aspiring engineers and security management experts. Collaboration tools, remote access solutions, and virtual support services will become increasingly sophisticated. The future promises a heightened focus on cloud computing and decentralised technologies. The landscape is poised for greater flexibility, scalability, and efficiency.

Roles such as **DevOps Engineer, Network/Systems Administrator,** and **Security Management Specialist** are hot sellers in 2023 and will remain relevant in 2024.

Skills that 2023 will carry with it into 2024

Docker, Kubernetes, Terraform, AWS CloudFormation, Azure Resource Manager, Google Cloud Deployment Manager, Pulumi, Ansible, Chef, Puppet, Crossplane, Vagrant



Digital and Mobile

In 2024, tech jargon will be on the decline. The no-code movement is expected to gain humongous momentum, revolutionising the way software is developed (Source: Codementor). Although it has its limitations, this would enable non-technical businesses to create fast, lightweight apps through user-friendly visual interfaces and pre-built components. Consequently, businesses can adapt rapidly to market shifts, innovate easily, and decrease reliance on traditional coding skills.

Roles such as Mobile Developers, Flutter Developer, iOS Developer, Android Developer, Mobile Application Security Specialist, and UI/UX Designer are hot sellers in 2023 and will remain relevant in 2024.

Skills that 2023 will carry with it into 2024 Kotlin, Swift 5.1, React Native, Ionic, Dart, Xamarin

Skills that are the future





Integration





Virtual Reality/Augmented
Reality (AR/VR)

Cyber Security

By the end of 2024, the projected cost of cyber attacks on the global economy is expected to surpass \$10.5 trillion (Source: Forbes). This staggering amount underscores the importance of treating cybersecurity as a business priority.

As in every other field of business, AI is expected to rule. Real-time anomaly detection, smart authentication, and automated incident response will exert a transformative influence on the way businesses approach cybersecurity. Follow it like the Bible: forewarned is forearmed.

Roles such as Chief Information Security Officer, Security Architect, Cybersecurity Engineer, Malware Analyst, Penetration Tester, Computer Forensics Analyst, Application Security Engineer, Cloud Security Specialist, Forensics Analyst, and Ethical Hackers are hot sellers in 2023 and will remain relevant in 2024.

Skills that are the future



Encryption



Decryption



Cryptographic Algorithms



Symmetric Cryptography









SKILL 07

Data Science

In 2024, data is predicted to be the "new oil". According to LinkedIn's Emerging Jobs Report, the data science market is set to grow significantly, reaching \$230.80 billion by 2026.

Gartner predicts that by 2024, half of the data science industry will rely on a unified cloud data ecosystem rather than manual integration. This shift comes with changes in the skills needed, making coding and Al increasingly essential for data scientists (Source: Forbes).

Roles such as **Data Scientist** are hot sellers in 2023 and will remain relevant in 2024.

Skills that 2023 will carry with it into 2024

Python With Libraries like Panda and NumPy, R, ML with AI and DL with NLP, SAS, Hadoop, Spark, Hive, Pig, Processing Large Data Sets, Multivariate Calculus & Linear Algebra, Data Wrangling, Statistics, Tableau, and PowerBI



Artificial Intelligence and Machine Learning

The two buzzwords on everybody's mind. The statistics signal plenty of developments on the road ahead in 2024 and beyond (Source: Techopedia). Generative AI is poised to become the new artisans of digital content, while real-time machine learning will leverage real-time data for more accurate predictions across various sectors.

Businesses are also predicted to step into a cookieless and passwordless world. Google has already begun setting the stage by phasing out third-party cookies from Chrome to provide a more Al-enabled, privacy-centric way to target users based on their interests. Other businesses are bound to follow suit.

Roles such as Machine learning or AI engineer, Computer Vision Engineers, and User Experience (UX) Specialists are hot sellers in 2023 and will remain relevant in 2024.

Skills that 2023 will carry with it into 2024

Python, R, TensorFlow, Statistics, Mathematics, and Problem-solving **Abilities**



ΑI Wrangler



Al Research Scientist



Sentiment **Analysis**



Entity Recognition



Chatbot and Virtual Assistant Development



Low-Code/No-Code Software Engineering



Quantum ΑI

Cloud Computing

Global business spending on cloud computing infrastructure is projected to surpass \$1 trillion in 2024 (Source: Forbes). This surge is fueled by the increasing demand for new platforms and Al-as-a-service offerings. Beyond cost savings, businesses are predicted to view cloud migration as a pathway to innovation, agility, and success, evident in emerging use cases across industries.

Anticipate a boom in Real-Time Cloud Infrastructure. The trend of tech-enabled wearables collecting real-time data will catalyse a surge in edge computing (Source: Medium).

Roles such as **Cloud Administrator and Cloud Architect** are hot sellers in 2023 and will remain relevant in 2024.

Skills that are the future



Integration of Blockchain with Cloud computing



Blockchain-as-a-Service (BaaS) Platforms



Edge Computing



Green Cloud Computing



Enterprise Resource Planning (ERP)

Looking forward, ERP software testing in 2024 will need to be more proactive rather than reactive. Automated Testing, AI and Machine Learning, and Integration Testing will take center stage. The move to Cloud-based ERP solutions will necessitate a shift in testing strategies, leveraging scalability, cost-effectiveness, and seamless updates. Yet, challenges in data security, privacy, and regulatory compliance will demand adept skills for effective resolution.

Roles such as **Technical Consultant, Functional Consultant, and Techno-Functional Consultant** are hot sellers in 2023 and will remain relevant in 2024.

Skills that 2023 will carry with it into 2024

ABAP, SAP Fiori, SAPUI5, SAP Basis, SAP S/4HANA, SAP SuccessFactors, SAP Customer Experience (CX), SAP Integration Suite









