



2021

IT SKILLS REQUIREMENT ANALYSIS REPORT

PAKISTAN SOFTWARE HOUSES
ASSOCIATION FOR IT & ITES



P@SHA IT Skills Requirement Analysis Report 2021

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Hira Zainab

Secretary-General, P@SHA

Foreword

I am pleased to present the P@SHA IT Skills Requirement Analysis Report 2021, an effort of P@SHA to create awareness about in-demand technologies and tools for the IT and ITeS industry.

A total of 148 unique IT and ITeS companies participated in the survey to share their requirements. I am grateful to each one of them for the inputs that led us to create this report.

IT and ITeS industry is the fastest growing industry in Pakistan. In 2021, IT Industry growth has surpassed all traditional sectors, with new avenues opening up for research and innovation. This growth represents significant opportunities but also comes with challenges. The biggest challenge is emerging to be a lack of human resources to catch up with the industry demand.

The driving force behind this growth is the human capital that each company wants to hire. With the increase in demand for resources, the industry has also reported that only 10% of graduating students are employable. The report captures the technologies where demand exists highest, hence skill development programs can create maximum impact.

Our participating companies also shared a need of hiring approximately 20,000 resources in the next few months. With only 25,000 graduates being produced by the universities on an annual basis, this represents a grave situation that can only be addressed by the relevant skill development programs.

We hope that you find P@SHA IT Skills Requirement Analysis Report 2021 useful. If you have any queries, comments, or suggestions, please feel free to reach out to me at sg@pasha.org.pk or write to the P@SHA research team at services@pasha.org.pk.

P@SHA Skill Development Committee



Shamim Rajani
COO – Genetech Solutions
Chair – Skill Committee



Ali Ihsan
CEO- Frag Games
Member – Skill Committee



Barkan Saeed
CEO- Vizteck Solutions
Member – Skill Committee



Bilal Mahmood
MD – Contour Software (Pvt) Limited
Member – Skill Committee



Bilal Hashmat
CEO, CureMD Pakistan (Pvt) Ltd
Member – Skill Committee



Salman Dar
CEO – Ithroos Private Limited
Member – Skill Committee



Dr. Shoab Khan
CEO – Care Private Limited
Member – Skill Committee

Introduction

About P@SHA

Pakistan Software Houses Association for IT and ITeS (P@SHA) is the one of the oldest ICT associations of the region and the sole trade association in Pakistan representing the industry since 1992. P@SHA is the only Pakistani entity globally registered with and recognized by institutions such as WISTA (World Information Technology and Services Alliance), ASOCIO (Asian Oceanic Computing Industry Organization) and APICTA (Asia Pacific ICT Alliance). Over the years, P@SHA has registered more than 1,000 companies across Pakistan and has been the voice of the industry, advocating policy initiatives and working towards creating a high growth sustainable business environment in the country.



1,000+
Member Companies



500+
Active Members

P@SHA IT Skills Requirement Analysis Report 2021

The P@HSA IT Skills Requirement Analysis Report focuses on the current landscape of Talent Demand in the IT &IT eS Industry across Pakistan. The IT Skills Requirement Report 2021 is based upon a survey conducted by P@SHA to find the most in-demand technology tracks and tools required by the industry. A total of 148 unique IT and ITeS companies participated in the survey. However, since 8 companies didn't provide complete data, the data of 140 companies is used for analysis and findings in salary benchmarking.

The report covers in-demand technology tracks nation and region wise, prospective in-demand technology tracks and the need of skilled resources. In an attempt to discover new opportunities for employment and bridge the skills gap of Pakistan's workforce, the IT Skills Requirement Report 2021 covers an exclusive demand and need analysis of IT Industry in Pakistan.

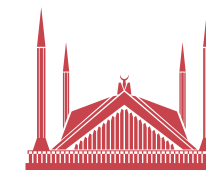
Overview

Participating Companies' Overview

Geographic Spread



22%
Karachi



31%
Islamabad























46%
Lahore



1%
Other












Top in-demand technologies & tools: Nationwide

Following are the top 20 in-demand technologies & tools nationwide. There is a direct correlation between the in-demand technologies and the lack of availability of skilled resources. It has been seen that the need for human resources with the following technical skills is highest across the nation.

1  Javascript Fullstack (MEAN/MERN)	2  C# .NET	3  React Native (Hybrid)	4  Android - JAVA	5  PHP (Laravel/CodeIgnitor/ Yii/Zend/Drupal)	6  Python	7  Flutter (Hybrid)
7  iOS - Objective C & SWIFT	9  AWS Developer- Associate	10  Java	11  MICROSOFT SQL	12  Unity	13  Selenium	13  Microsoft Certified: Azure Fundamentals
15  Postgres	16  Redis/ElasticSearch AWS	16  Agile Certified Practitioner	18  Professional Scrum Master™	19  Ruby on Rails	20  Salesforce	

Top in-demand technologies & tools: Islamabad












Following are the top 10 in-demand technologies & tools region-wise. This ranking highlights the need for skilled resources with these technical skills in the Islamabad region.

<div>1</div> <div></div> <div>Javascript Fullstack (MEAN/MERN)</div>	<div>2</div> <div></div> <div>C# .NET</div>	<div>3</div> <div></div> <div>Android - JAVA</div>	<div>4</div> <div></div> <div>PHP (Laravel/CodeIgnitor/ Yii/Zend/Drupal)</div>	<div>4</div> <div></div> <div>Python</div>	<div>4</div> <div></div> <div>iOS - Objective C & SWIFT</div>	<div>7</div> <div></div> <div>React Native (Hybrid)</div>
<div>7</div> <div></div> <div>MICROSOFT SQL</div>	<div>9</div> <div></div> <div>Flutter (Hybrid)</div>	<div>9</div> <div></div> <div>Java</div>	<div>11</div> <div></div> <div>AWS Developer- Associate</div>			



Top-in demand technologies & tools: Lahore












Following are the top 10 in-demand technologies & tools region-wise. This ranking highlights the need for skilled resources with these technical skills in the Lahore region.

1  Javascript Fullstack (MEAN/MERN)	2  C# .NET	3  React Native (Hybrid)	4  Android - JAVA	4  Unity	6  Python	6  iOS - Objective C & SWIFT
8  Flutter (Hybrid)	8  AWS Developer- Associate	10  PHP (Laravel/CodeIgnitor/ Yii/Zend/Drupal)	10  Java			



Top in-demand technologies & tools: Karachi

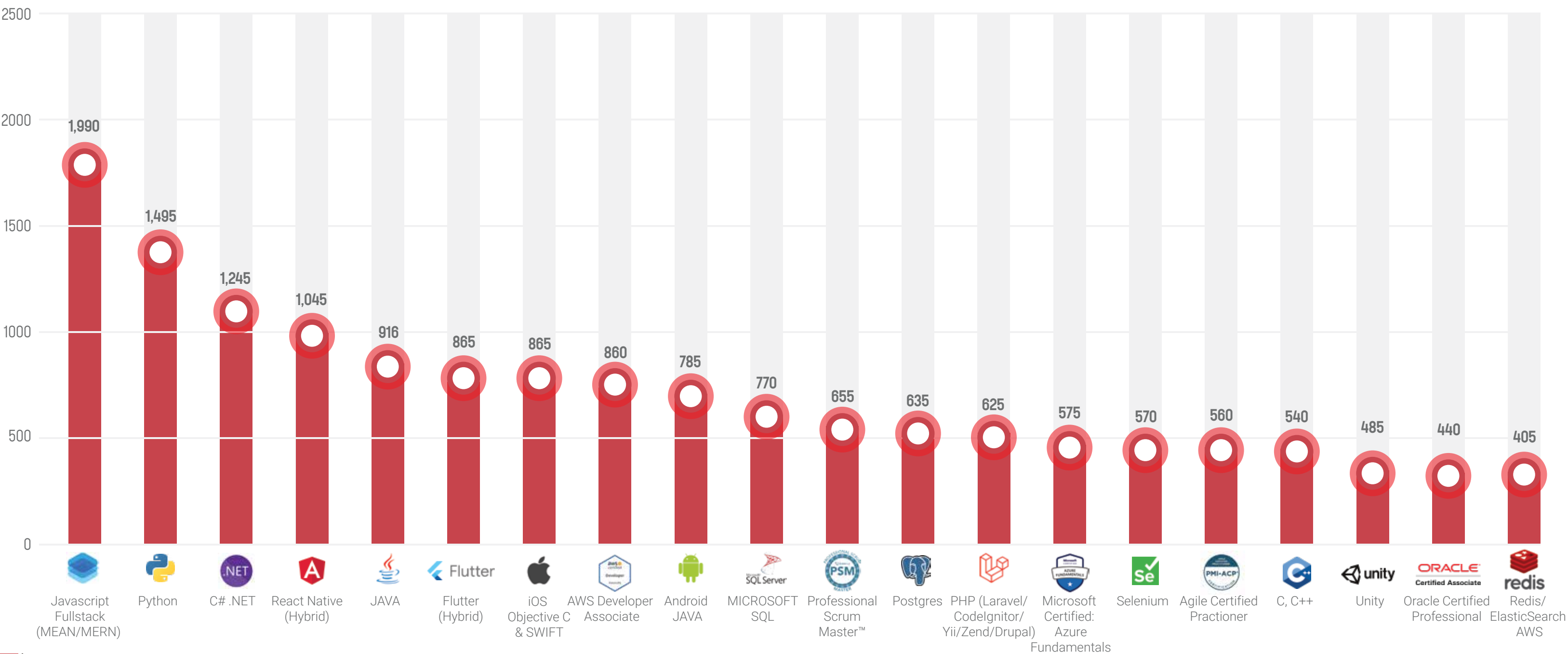
Following are the top 10 in-demand technologies & tools region-wise. This ranking highlights the need for skilled resources with these technical skills in the Karachi region.

1  React Native (Hybrid)	2  Javascript Fullstack (MEAN/MERN)	2  Flutter (Hybrid)	4  AWS Developer- Associate	5  C# .NET	5  PHP (Laravel/CodeIgnitor/ Yii/Zend/Drupal)	7  Android - JAVA
7  iOS - Objective C & SWIFT	9  Microsoft Certified: Azure Fundamentals	10  Python	10  Microsoft SQL Server MICROSOFT SQL			



Hiring Resources (Next 6- 8 Months)

Following are future top 20 in-demand technologies & tools nationwide keeping in mind the current technology trends.
A total of **19,451 resources** will be hired in next 6-8 months for the **42 technology tracks** mentioned in the survey.



Participating Companies

Participating Companies