

CSE JOB SECTOR && FUTURE PLAN

Data Scientists:

Languages:

python,java,mastery in mathematics and statistics.

Work:

Help organization to make objective decision.

RoadMap:[Data Science Learning Roadmap for 2021 \(freecodecamp.org\).](https://www.freecodecamp.org/learn/data-science-learning-roadmap/)

[Data Science Roadmap 2023: Learn To Become a Data Scientist \(skillslane.com\).](https://www.skillslane.com/data-science-roadmap-2023/)

Backend Web Developer:

Languages:

c#,java,python,PHP,ASP.NET.

Work:

Write server side web Application , write web services.

RoadMap:[Backend Developer Roadmap](#)

FRONTend Developer:

Languages:

HTML,CSS,BOOTstrap,JavaScript(jquery,ajax,vue.js,node.js,angular.js,nuxt.js)

Work:

Implementing Visual elements of a website.

RoadMap:[Frontend Developer Roadmap](#)

FULL Stack Developer:

Languages:

c#,java,python,PHP,ASP.NET ,

HTML,CSS,BOOTstrap,JavaScript(jquery,ajax,vue.js,node.js,angular.js,nuxt.js)

Work:

Fulfill roll of Frontend and Backend.

RoadMap:[Ultimate RoadMap to Become Full Stack Developer in 2023 - DEV](#)

[Community](#)

[Full Stack Developer Roadmap](#)

IOT Engineer:

Work:

Develop,manage,monitor IOT devices

RoadMap:

[Roadmap For How To Become An IoT Engineer, Internet Of Things](#)

[\(cselectricalandelectronics.com\)](#)

[mahmoodfathy/IoT-Roadmap: A Roadmap to become an IoT developer either an embedded or IoT Application Developer , this roadmap is highly subjective but it reflects the market and can be further developed \(github.com\)](#)

[Roadmap and Resources to Become an IoT Engineer | by Karthik Bhandary | DataDrivenInvestor](#)

Android Developer:

Languages:

kotlin,java

Work:

Create ,architect android application.

RoadMap:

[Android Developer Roadmap: Learn to become an Android developer](#)

[skydoves/android-developer-roadmap: 📖 The 2023 Android Developer Roadmap suggests learning paths to understanding Android development. \(github.com\)](#)

IOS App Developer:

Languages:

swift

Work:

Create ,architect iphone application.

RoadMap:

[BohdanOrlov/iOS-Developer-Roadmap: Roadmap to becoming an iOS developer in 2018. \(github.com\)](#)

[iOS Developer Roadmap 2022 - DEV Community](#)

Game Developer:

Languages:

C Sharp or C++

Work:

Plan,Design,Produce Video game

RoadMap:

[utilForever/game-developer-roadmap: Roadmap to becoming a game developer in 2022 \(github.com\)](#)

[The 2020 Game Developer Roadmap \(programming-hero.com\)](#)

Database Administrator:

Languages:

SQL(mastery)

Work:

Responsible for designing overall database schema (tables & fields) and so on.

RoadMap:

[DBA Roadmap: Learn to become a database administrator with PostgreSQL dba-roadmap · GitHub Topics](#)

Network Engineer & Administrator:

Languages:

SQL(mastery)

Work:

A network administrator oversees the maintenance and monitoring of computer infrastructures

RoadMap:

[eovchar/neteng-roadmap: Network Engineering at Scale Roadmap/Landscape \(github.com\)](#)

Artificial And Intelligence:AI Expert Roadmap (am.ai)

1)Machine Learning

2)Robotics

1)

Languages:

Python,R,Java,JavaScript,SCALA,Lisp,C++,C#,Julia,Shell,TypeScript

RoadMap:

[mrdbourne/machine-learning-roadmap: A roadmap connecting many of the most important concepts in machine learning, how to learn them and what tools to use to perform them. \(github.com\)](#)

[Best Machine Learning Roadmap | Definitive guide to ML for 2022 - Myriad Brain](#)

2)Robotics

Languages:

python,java,matlab,c,c++,lisp,c#

RoadMap:[Robotics Roadmap - CCC \(cra.org\)](#)

System Administrator:

Languages:

Bash,python,powershell,azure powershell,node.js,kubernetes

Work:

· System administrators support, troubleshoot, and maintain computer servers and networks

RoadMap:

[system-administration · GitHub Topics](#)

[Career Roadmap: Systems admin role isn't dead | CIO](#)

DevOp Engineer:

Languages:

- Java
- PHP
- JavaScript
- Golang
- Ruby
- Perl
- SQL

Work:

[DevOps engineers](#) combine software development and IT operations

RoadMap:

[DevOps Roadmap: Learn to become a DevOps Engineer or SRE](#)

[DevOps Roadmap 2022: How to Become a DevOps Engineer in 8 Steps \(hubspot.com\)](#)

Cyber Security Expert:

Languages:

SQL(mastery)

Work:

Ensuring cyber security

RoadMap:

[How to Become a Cyber Security Expert? Ultimate Roadmap \(knowledgehut.com\)](#)

[Cyber Security Roadmap: Learn to become a Cyber Security Expert](#)

QA Engineer:

Languages:

C#, Java, JavaScript, Python)

Work:

Checking Quality of a developed software

RoadMap:

[QA Roadmap: Learn to become a modern QA engineer](#)

[fityanos/awesome-quality-assurance-roadmap: :books: The starting point of your career as a Software Quality Assurance Engineer | Quality Automation Engineer :books: \(github.com\)](#)

Research Analyst:

Languages:

Java, JavaScript, Python,R,SQL,Scala,MATLAB

Work:

finance professional responsible for gathering, analysing, interpreting data and preparing research reports on assets, stocks and securities.

RoadMap:

[Five Years Roadmap For Research Analyst Career Path | Presentation Graphics | Presentation PowerPoint Example | Slide Templates \(slideteam.net\)](#)

BlockChain Developer:

Languages:

JavaScript, Go,Solidity

Work:

Developing and deploying smart contracts: Blockchain developers are responsible for creating and deploying smart contracts using programming languages such as Solidity, JavaScript, and Go.

RoadMap:

[Blockchain Developer Roadmap: Learn to become a blockchain developer](#)

[Blockchain Developer Roadmap 2022: A Complete Guide \(knowledgehut.com\)](#)

UX/UI Designer:

Languages:

React,Angular,HTML/CSS,JavaScript

Work:

UI designers create the graphical portions of mobile apps, websites, and devices

RoadMap:

[A good roadmap to the ideal UI/UX design \(rangle.io\)](#)

Mern Stack Developer:

Languages:

M - MongoDB

E - Express

R - React

N - Node

Work:

Designing And Implementing APIs

RoadMap:

[Complete roadmap to become a pro in MERN STACK 🚀 - DEV Community](#)

[RoadMap to learn MERN Stack for Beginners - DEV Community](#)