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Why Learn Python?

A Microsoft DB/ETL/BI Developer's Answer

About Me

- Evolutionary Geek, Software Developer, Data Wrangler
 - First learned Basic on a TI 99/4A and a C-128 (remember Peek and Poke)
 - WordPerfect, Lotus 1-2-3 macros
 - MS Office and Windows for Workgroups
 - MS Access and VBA
 - VB 6.0, SQL, ADO
 - VB.Net, SQL
 - C#, SQL, SSIS, SSRS, Azure Data Factory, Azure SQL, Azure DW
 - Some ASP/HTML/CSS
 - JavaScript, Alexa Skill Development
 - Python, Machine Learning, Azure Data Bricks, Power BI
- MCP since 1993



Why Learn Python?

1. It's a powerful scripting language
2. It has a TON of pre-built modules
3. It is the language of choice for Machine Learning
4. It is essential for (Azure) Data Bricks
5. It is a first-class language in Azure and AWS

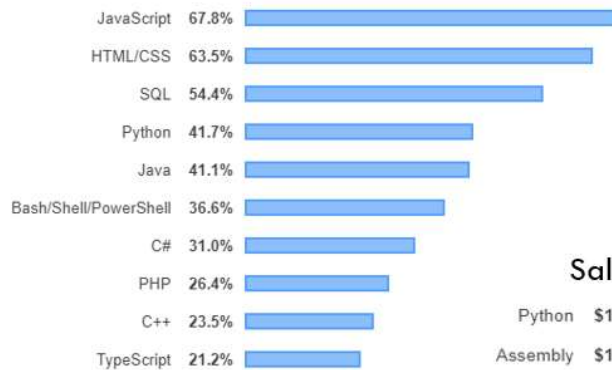


Which Language Should I Learn in 2020?

Most Popular Technologies

Programming, Scripting, and Markup Languages

All Respondents Professional Developers



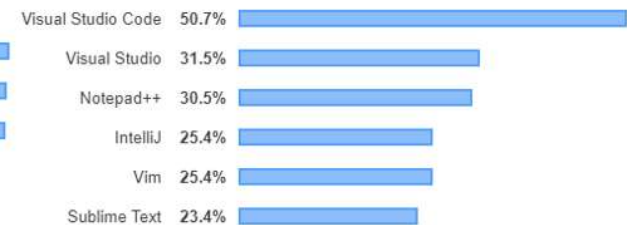
Most Loved, Dreaded, and Wanted Languages

Loved Dreaded Wanted



Most Popular Development Environments

All Respondents Web Developers Mobile Developers SRE/DevOps



Salary

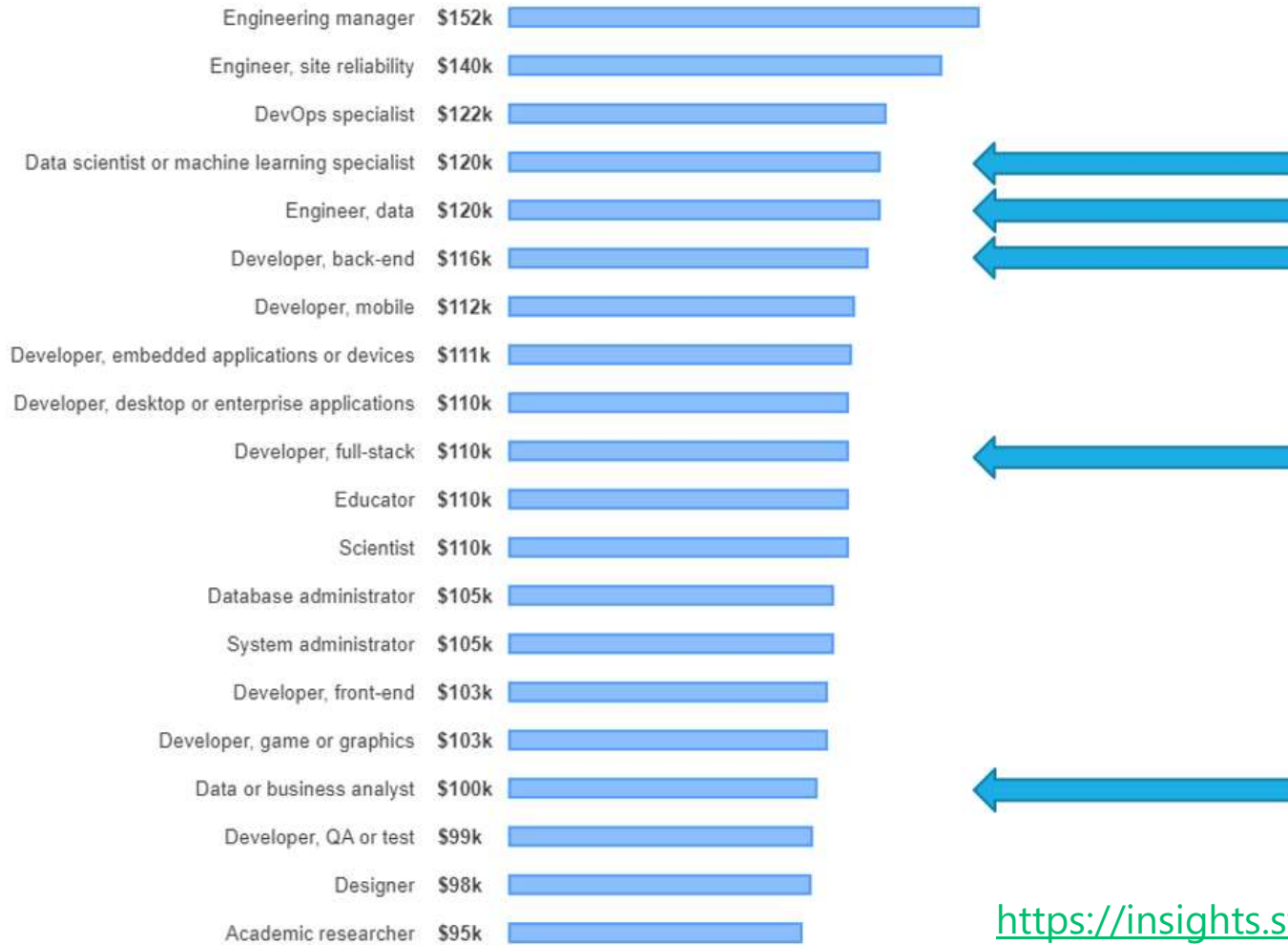


<https://insights.stackoverflow.com/survey/>



Salary by Developer Type

Global United States



<https://insights.stackoverflow.com/survey/>



Three Python Utilities You Can Use

1. Did you ever wonder which one of the hundreds of SSIS packages in your repository loads a specific table?
2. Did you ever wish you could figure out which of the myriad queries in your SSRS report is/are the slow one(s)?
3. You've got the address data, don't you wish you could plot them on a map visual?





Demos

Demo 1

Did you ever wonder which one of the hundreds of SSIS packages in your repository loads a specific table?

1. SSIS Packages are just XML
2. Python has an xml module that's quick
3. Pandas can easily write the results to Excel



Demo 2

Did you ever wish you could figure out which of the myriad queries in your SSRS report is/are the slow one(s)?

1. SSRS Reports are also just XML
2. Python has a clr module (as in .Net CLR)
3. pyodbc can be used to run SQL statements



Demo 3

You've got the address data, don't you wish you could plot them on a map visual?

1. Using pyodbc we can read/write SQL data
2. Google has a free* Geocoding REST API
3. Python's json and requests modules call the API

* Free in reasonable batches, Credit Card required for authentication only

