Information technology

& the job market

2022 Jun - Hellenic Open University

Intro

Job market trends (40 years)

The exception of Information Technology

University & next steps

My 1st job

Adzuna is lending the time to prepare and present this talk

The opinions expressed in this presentation are personal and not necessarily those of Adzuna

adzuna

`vkatsikaros` `at` `gmail` `dot` `com`

The slides will be given, all resources are available

Questions in the chat - let's discuss at the end

- Head of infrastructure
- Infrastructure engineer
- Backend engineer & DB administrator

- 12 years remote work

Summer of Code

Left screenshot (Adzuna)

ⓓadzuna

Login Register Post job

ValueMyCV
WHAT ARE YOU WORTH?

£0
JACK'S CV VALUE

⬆ Upload your CV today

SEARCH JOBS

What?
job, company, title

Where?
city, county or postcode

🔍 Search

Let's restart Britain's jobs engine. **1000's of remote jobs** ❯ or **find out more** ❯

Adzuna - zero in on the right role

Every job
Searching for the right job is hard work. We've brought

Smart matches
We've spent a decade developing a more

Great data
Using the best tools is a no brainer. Find local salary

Right screenshot (Find a job)

Find a job

Sign in Create account Employers Cymraeg

Tell us about this service – your feedback will help us to improve it.

What?
for example job, company, skills

Where?
for example city, county or postcode

Search

Advanced search

Apply for jobs

You can search for jobs without an account. But to apply you need to create an account or sign in.

Create account ❯

Already have an account? Sign in

Latest update

JobsAware
To stay safe in your job search and flexible work we recommend that you visit JobsAware for information and to get free, expert advice for safer work.

Find an apprenticeship
Like the idea of becoming an apprentice? Use Find an apprenticeship to search, register and apply for apprenticeship vacancies.

Jobseekers from abroad
Before applying for jobs please check whether you need a visa to work in the UK.

Popular categories
Trade and construction jobs
Hospitality and catering jobs
Maintenance jobs
Logistics and warehouse jobs
Healthcare and nursing jobs

Popular locations
London
Glasgow
Liverpool
Manchester
Leeds

Popular searches
Cleaner jobs
Warehouse jobs
Retail jobs
Driver jobs
Labourer jobs

Browse all jobs »

What? ◎ python sql

Where? 📍 London, UK

🔍 Search   _Advanced_

645 Python sql Jobs in London

Average salary
£61,997

✉ Receive the newest jobs for this search by email: your.email@domain.com   **Create alert**

Filter results

Sort by ＋

Salary ＋

Remote ＋

Location ＋

Category ＋

Company ＋

Contract type ＋

Hours ＋

Related searches

(python) (python developer)

(sql) (sql analyst)

Data Developer **Python SQL** - WfH ♡

£55000 - £70000 PER ANNUM + BENEFITS - CLIENT SERVER -
LONDON, SOUTH EAST, SOUTH EAST LONDON
Data Developer London to £70k Remote Interview WFH Data Developer / Engineer (**Python SQL** BI) Remote
Interview WFH. Are you a data technologist seeking a role where you'll ... a competitive salary (to £70k) plus
benefits. Apply now or call 020 8016 4456 to find out more about this Data Developer / Engineer (**Python SQL**
BI) opportunity. This job was originally posted ...

Data Engineer - **Python**, **SQL**, Spark ♡

JOBSWORTH: **£ 52,136 P.A.** - OLIVER BERNARD - LONDON, SE11
Data Engineer - **Python**, **SQL**, Spark Location: London, N1C 4AX (Remote currently)Salary: £60,000 -
£70,000Industry: E-commerceTech Stack: **Python**, **SQL**, Pandas, Spark, AWSGreat ... opportunity for a
talented Data Engineer (**Python**, **SQL**, Pandas, AWS) who also has strong experience of developing
applications using Python to join a business that is entrusted ...

Python/ **SQL** Developer ♡

JOBSWORTH: **£ 46,837 P.A.** - AUSTIN FRASER - LONDON, LONDON
Python/ **SQL** Developer 3 month contract London/ Remote Austin Fraser are currently partnering with an
exciting London-based start up who have some interesting projects coming up ... and are urgently looking for
a **Python**/ **SQL** Developer to join them. This will be a 3 month contract initially with strong possibilities of
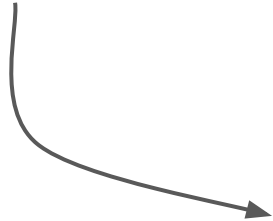multiple extensions beyond this. It will be fully remote ...

adzuna

- TLDs: 20
- Traffic: ☆☆M visits/month
- Web scraper: ☆☆M ads/day
- Partner network: ☆☆G ads/day
- User facing DB: ☆TB storage
- Sent: ☆M emails/day
- Machines: ☆☆☆

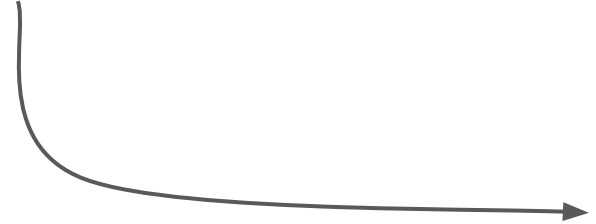In 2020-21, we estimate we have helped 1M people find jobs 🎉

Food for thought

If you need to lookup the source

https://example.com "Blah Blah"

https://example.com "Blah Blah"

The job market

The job market conditions

are not ideal

https://flic.kr/p/Z5b21b

"The crisis caused ==an explosion in uncertainty and insecurity== and severe lack of trust of the labor force when it comes to ==the protection of fundamental labor rights and their standard of living=="

"In 2021 Greece recovered from the pandemic shock […] However, if the cost of living is taken into account, Greece has the 2nd smaller per capita GDP in EU. Moreover, it's the only state in EU where this metric is less than the 2007 levels."

"Salaries were adjusted, but the increased competition that should have helped to bring prices down never happened. The burden of the internal devaluation fell excessively on labor."

"Several years of recession and austerity measures have persistently challenged the constitutionally protected right to work and the right to an adequate standard of living."

"Salaries were drastically cut […] and working conditions weakened"

1992-2016: "While real annual wages grew by a total of 20% in the top decile, they did not change in the fifth and sixth deciles, and in the two lowest deciles they decreased by around 35%"

"1 in every 8 children in America (σημ ΗΠΑ) is experiencing shockingly high rates of food insecurity, school drop out, teenage pregnancy and/or child deaths"

"Real wages rose at the top of the distribution, whereas wages ==stagnated or fell at the middle and bottom==."

Information Technology

is one of the exceptions

Staff shortage

"One in 5 enterprises employed Information and Communication Technology specialists"

"In 2017, more than half of EU enterprises that recruited or tried to recruit Information and Communication Technology specialists had difficulties in filling ICT vacancies."

Staff shortage

2015: "Europe could face ==a shortage of== more than ==800,000== skilled ICT workers by 2020"

2017: "shortages of IT specialists are forecasted to reach around ==500,000 by 2020== and we estimate that Europe would need ==50,000 new high-tech leaders== each year till 2025".

Backend Software Engineer - Individual Contributor
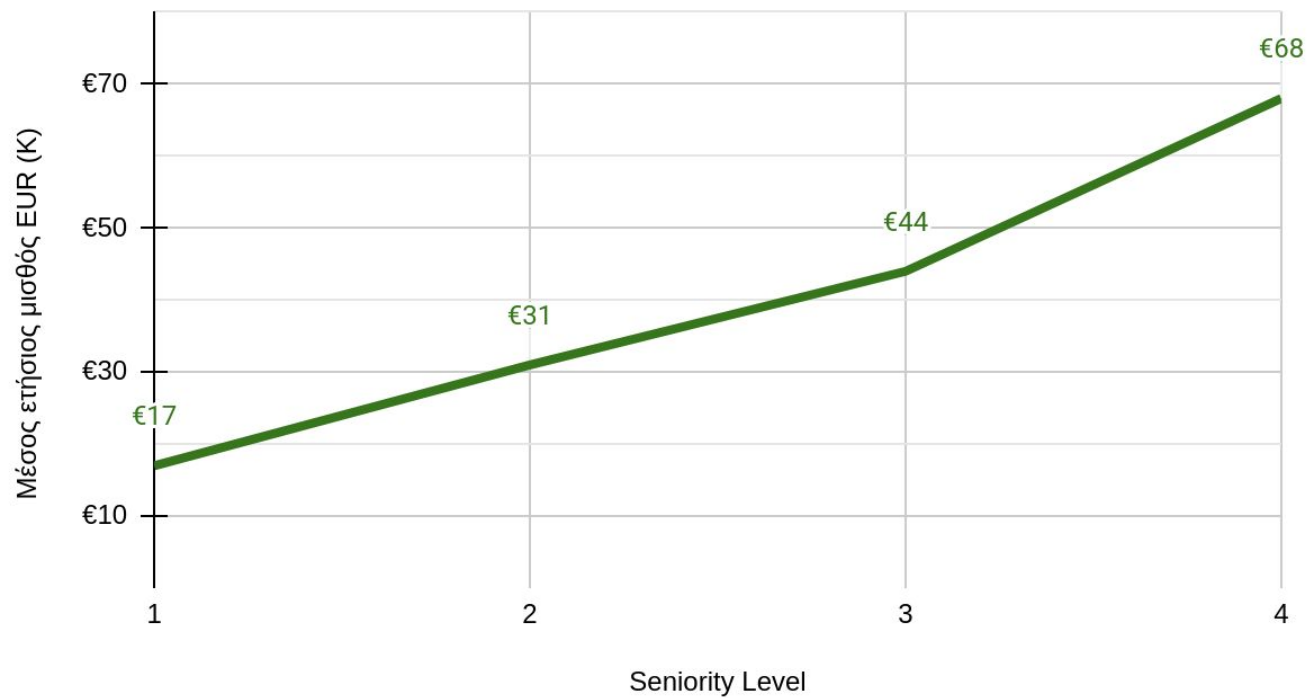
london, uk   backend developer   graduate degree (e.g. ma, ms)   postgresql   amazon-web-services   linux   go   python

25th percentile   Μέσος ετήσιος μισθός (προ φόρων)   75th percentile

Μισθός GBP (K)

Χρόνια εμπειρίας

london, uk   backend developer   graduate degree (e.g. ma, ms)   postgresql   amazon-web-services   linux   go   python

25th percentile   Μέσος ετήσιος μισθός (προ φόρων)   75th percentile

Μισθός GBP (K)

Χρόνια εμπειρίας

DevOps role
USD (K)

35   50   75   100   125   150   250
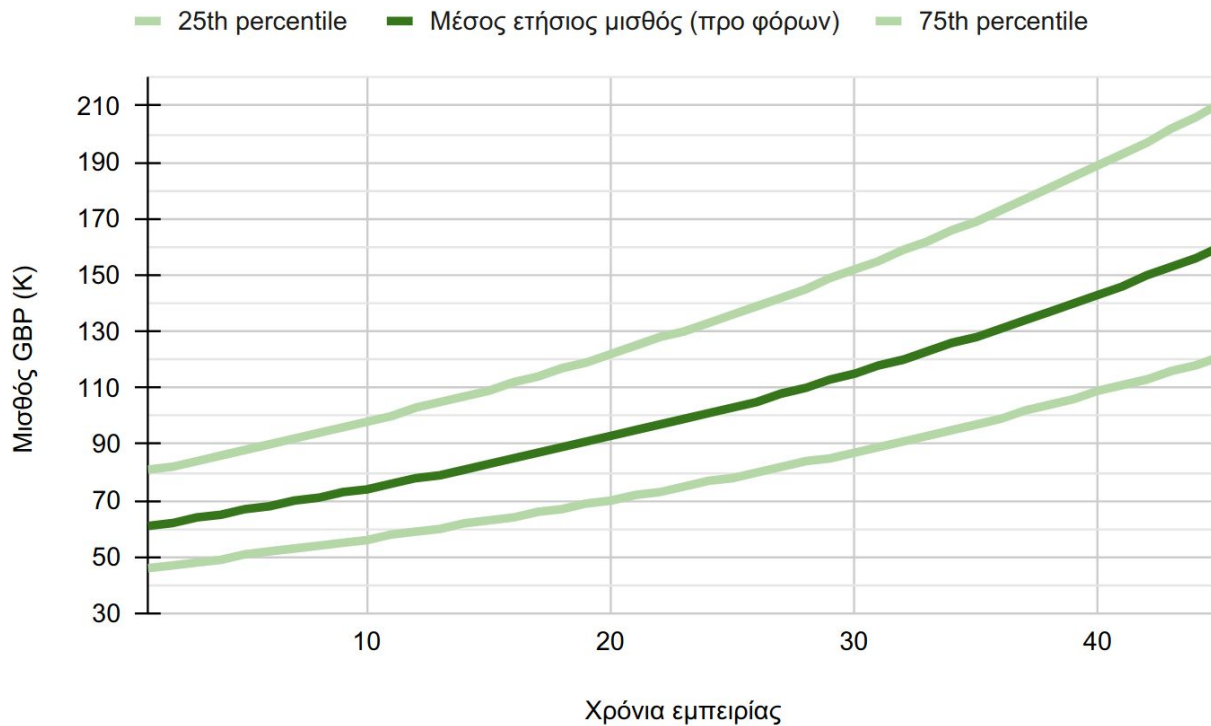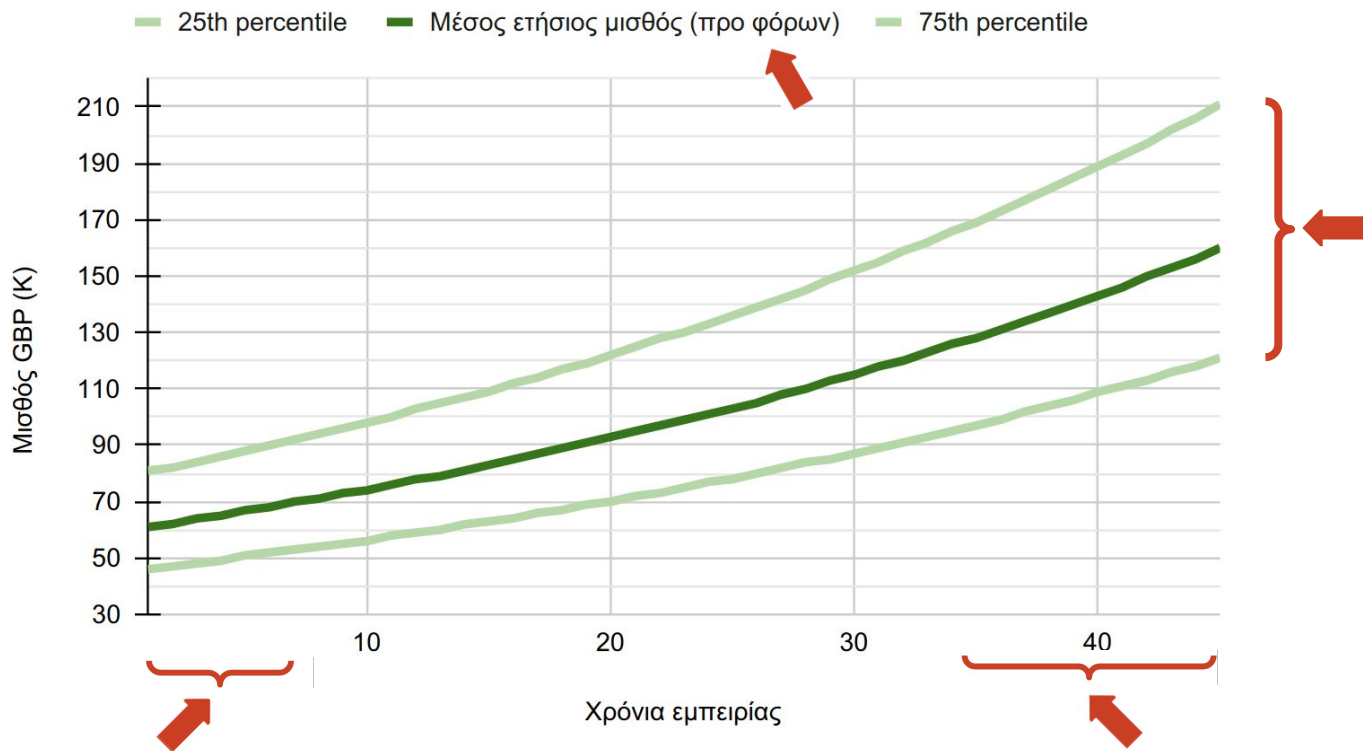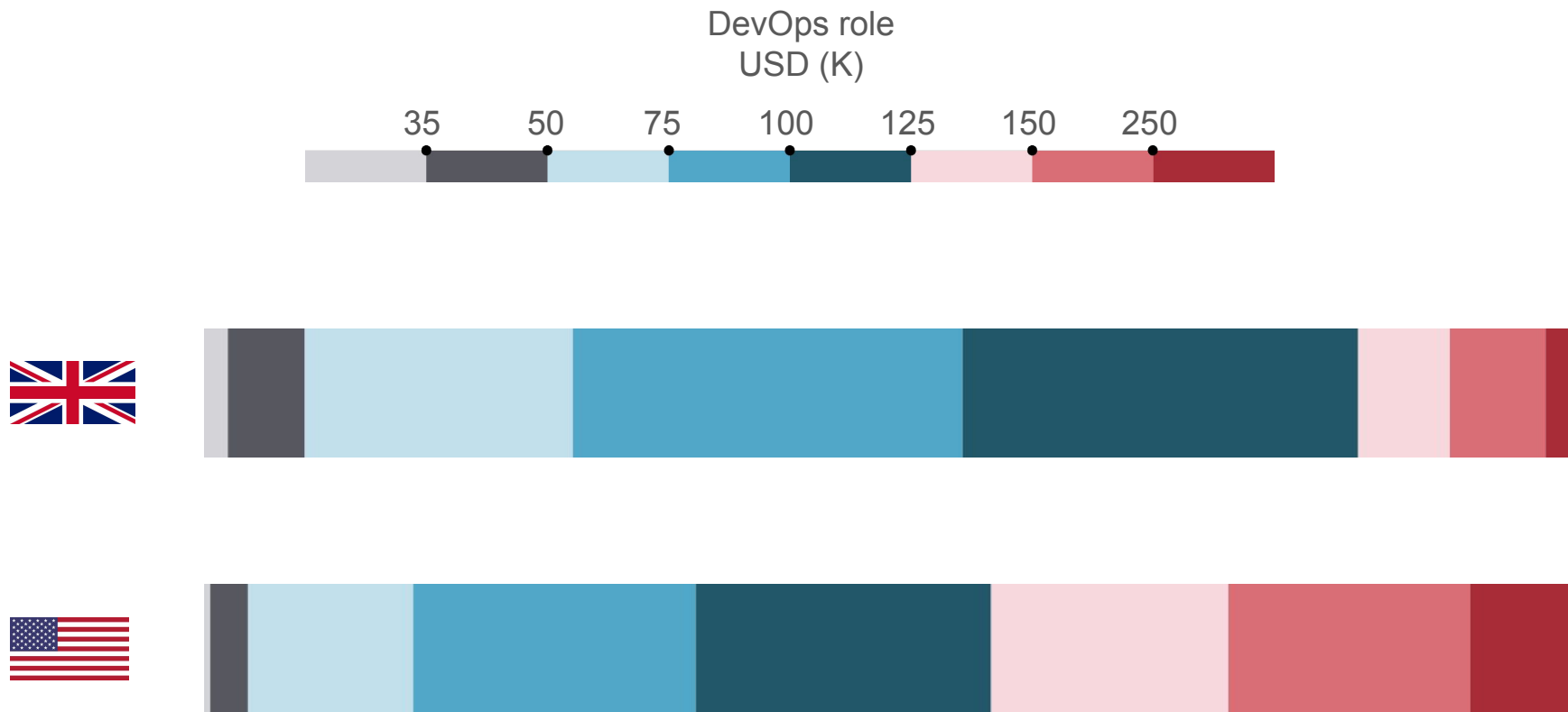
Top-tier

Basecamp: "an annual salary of <mark>$207,978</mark>" (σημ Engineering Manager for our Security, Infrastructure and Performance)"

Oxide: "we all got a raise to <mark>$180,250</mark> in December" (σημ 2020)

Top-tier - Big Tech

Software Engineer

Salary

Satisfaction
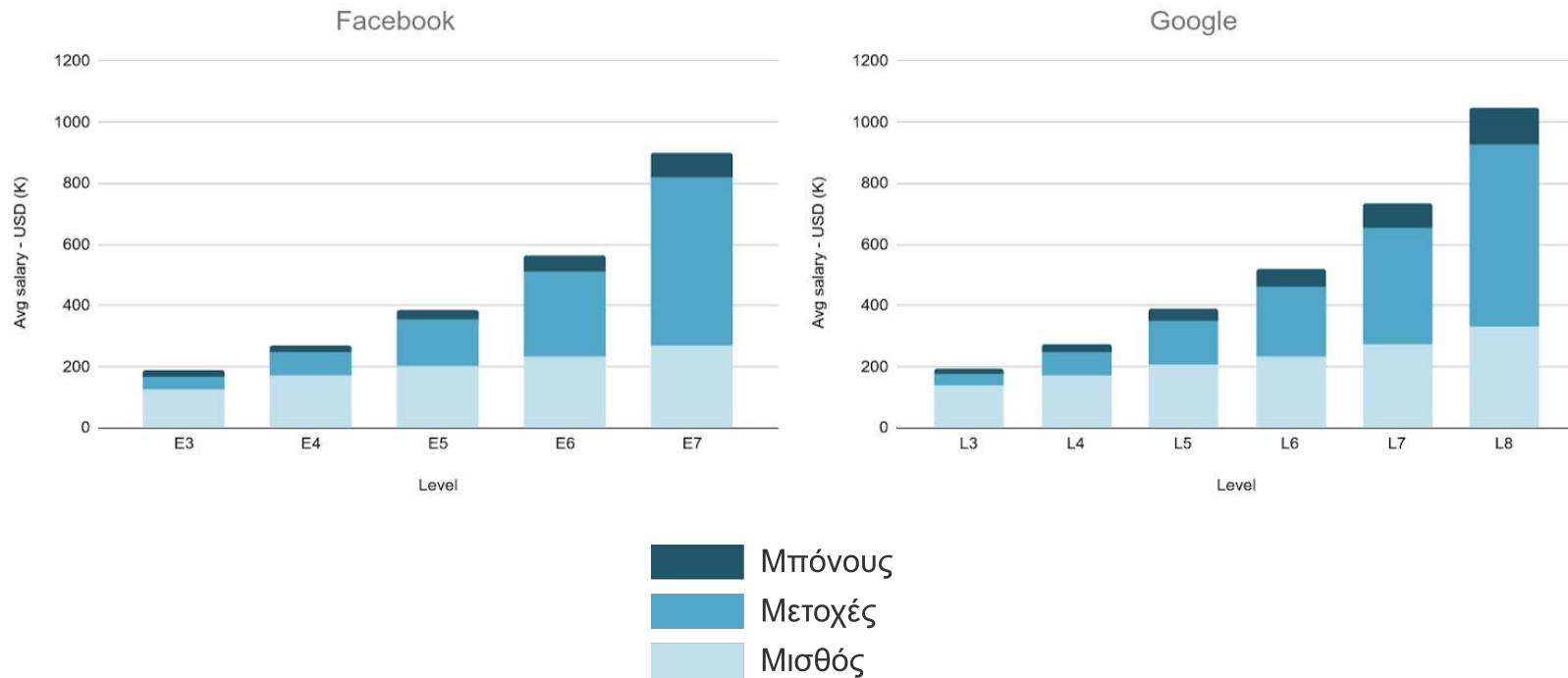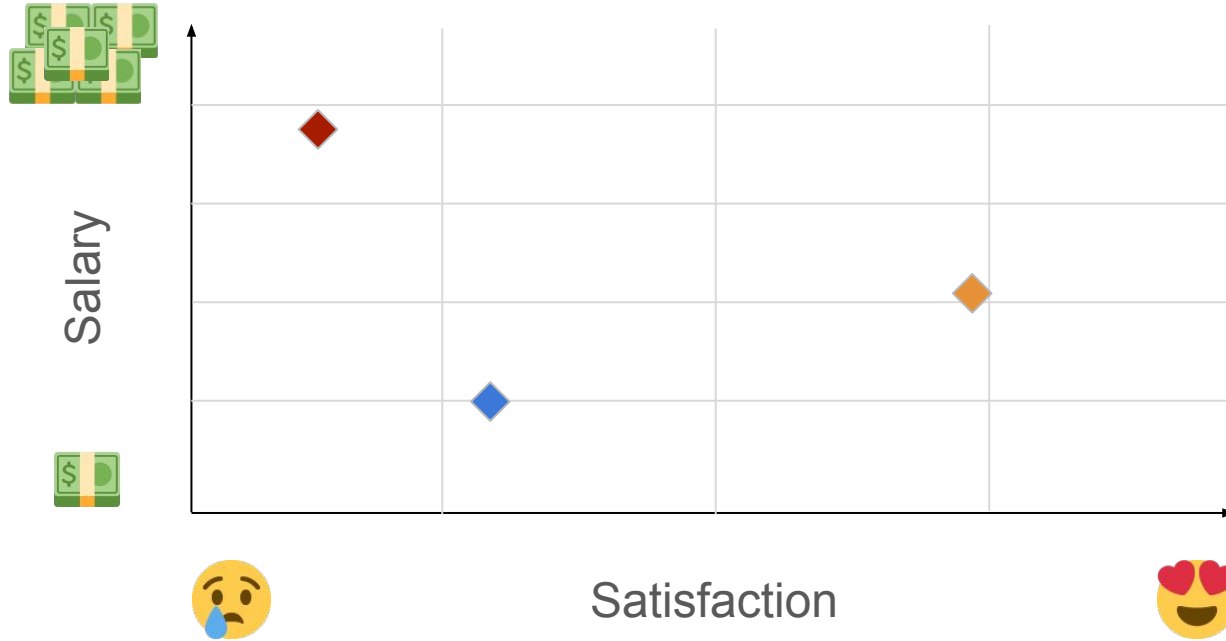
Remote work

- Discipline
- Sharp communication skills
- Work from office experience

Be aware of:

- Lack of social contacts
- Hidden costs (office, +1 room, heat-A/C)
- Work hours

https://youtu.be/DjKCTIWsx0c "Top tier Remote (Thanasis Polychronakis)" - GreeceJS, 2017
http://ergo.human.cornell.edu/default.html "Cornell University Ergonomics Web"

dead ends

saturation
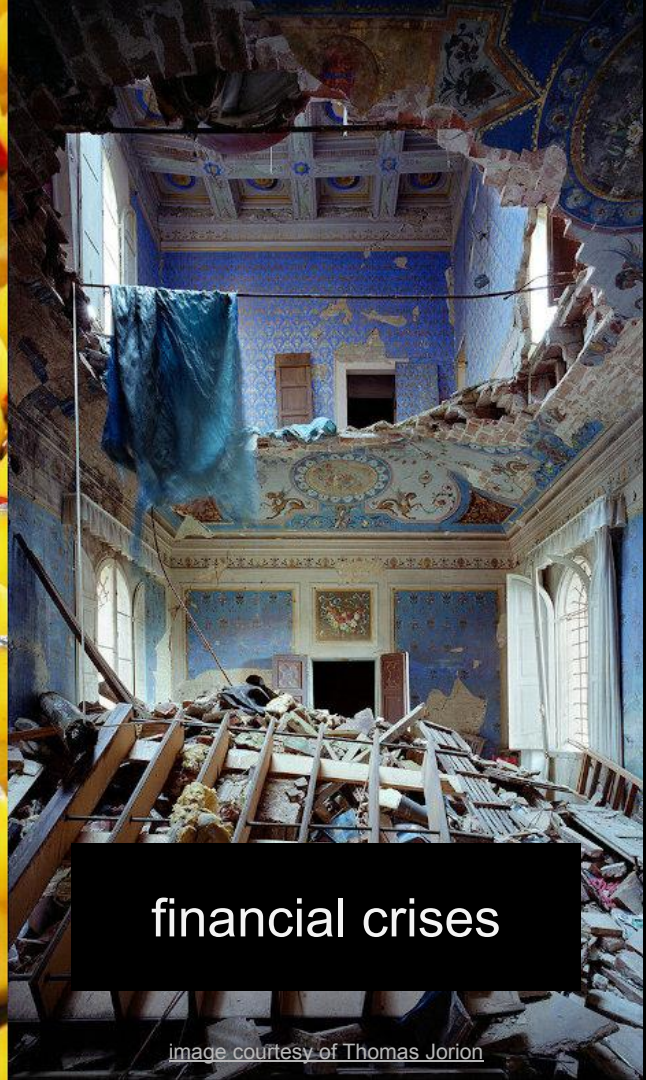
financial crises

University

and next steps

Red brick & Ivy league

Google [mit tuition fees   ✕ 🔍]

Q All   🖼 Images   📰 News   📍 Maps   ▶ Videos   ⋮ More   Tools

About 38,900,000 results (0.74 seconds)

Massachusetts Institute of Technology / Undergraduate tuition and fees

53,450 USD

2019 – 20

People also search for

Harvard University 54,002 USD   Stanford University 56,169 USD   Yale University 57,700 USD

1		Massachusetts Institute of Technology (MIT)		🇺🇸
2		Stanford University		🇺🇸
3		University of California, Berkeley		🇺🇸
4		Carnegie Mellon University		🇺🇸
5	ETHzürich	ETH Zurich		🇨🇭
6		Tsinghua University		🇨🇳
7		Harvard University		🇺🇸
8		Nanyang Technological University		🇸🇬
9		University of Oxford		🇬🇧
10		University of California, Los Angeles		🇺🇸

MSc + tuition

MSc + cost of life

Programming

Get exposed to programming, the language doesn't matter that much

Indicative: python, java, go, bash, javascript

https://exercism.io/, "Code practice and mentorship for everyone"
https://bitfieldconsulting.com/golang/how, "How to really learn Go"

Basic technical skills

Network (TCP, HTTP)

SQL

Linux cli

Computer architecture

https://missing.csail.mit.edu, "The Missing Semester of Your CS Education"
https://wizardzines.com/, "programming zines", Julia Evans
https://training.linuxfoundation.org/training/introduction-to-linux/, "Introduction to Linux (LFS101x)", The Linux Foundation
Ops School Curriculum — Ops School Curriculum 0.1 documentation, "Ops School Curriculum"

Open source projects

Open your horizons, get exposed to collaborations

Practice (reading code, collaboration)

Positive for the CV

Find something interesting enough so that you invest the time

Open source projects

How do I participate?

1.   Prepare your dev env
2.   Contact developers / community (slack/mailing list)
3.   Find 1-2 simple bugs
4.   Try (commits)

https://jvns.ca/blog/good-questions/ "How to ask good questions", Julia Evans
https://stackoverflow.com/help/how-to-ask "How do I ask a good question?", Stackoverflow

https://mitchellh.com/writing/contributing-to-complex-projects "Contributing to Complex Projects", Mitchell Hashimoto
https://andre.arko.net/2016/11/12/how-to-contribute-to-open-source/ "How to Contribute to Open Source", André Arko
https://python-gsoc.org/index.html#gettingstarted "Python Summer of Code - How do I get started?", Python Software Foundation

Google Summer of Code

"... the opportunity to gain real-world experience by working on a three month coding project with one of more than 200 open source organizations under the guidance of a mentor."

https://buildyourfuture.withgoogle.com/programs/summer-of-code/ "Google Summer of Code"
http://blog.gerv.net/2006/05/how_not_to_apply_for_summer_of/ "How Not To Apply For Summer Of Code"

Similar programs

- Season of Docs, https://developers.google.com/season-of-docs
- Season of KDE, https://season.kde.org/
- Outreachy, https://www.outreachy.org/
- Tweag Open Source Fellowship, https://www.tweag.io/blog/2020-02-14-os-fellowship/
- Summer of Nix, https://summer.nixos.org/
- ~~Rails Girls Summer of Code,~~ https://railsgirlssummerofcode.org/

Foreign languages, (asynch) communication

My 1st job

Requirements

"Required Technical and Professional Expertise:

🤣 Minimum 12+ years' experience in Kubernetes administration and management."

Requirements

You don't need to meet 100% of the requirements

"2+ years of experience" ignore it - especially if you have commits, internship, GSOC

Tax + Social security

Take home money?

Differences employee / contractor

VAT

Stock taxation (if stocks is an option)

https://blog.pragmaticengineer.com/equity-for-software-engineers/ "Equity 101 for Software Engineers at Big Tech and Startups", Gergely Orosz
https://aftertax.gr/ "Υπολογισμός καθαρού μισθού"

Your application will be ignored and rejected 😱

Send

Answers

Final offer

1st job goals

It's OK not to find the top salary on the 1st go. It will happen!

For starters, search for a healthy environment where you can learn.

Next steps

Education (books, courses, videos, and of course time)

Work with a senior member of the team

Next steps

Search for the next job if you are not satisfied

Practice interviewing

The bigger raises usually come when you change jobs

https://youtu.be/r8RxkpUvxK0 "What I Learned Doing 250 Interviews at Google", Moishe Lettvin

Do your research

Job boards

- https://www.adzuna.co.uk/ (.com, .fr, .it, κτλ)
- https://gr.indeed.com (.co.uk, .fr, .it, κτλ)
- https://www.glassdoor.com
- https://stackoverflow.com/jobs/

Remote work job boards

- https://github.com/fossjobs/fossjobs/wiki/resources#job-aggregators
- https://weworkremotely.com/
- https://remoteintech.company/

Directly at the website of companies that interest you 🎯

Information technology is privileged when it comes to salary

Think about your career frequently and for different time scales

The greek university is one good step of the many that you will take

Open your horizons, get involved with open source projects

Practice interviews, do your research, keep an eye on the job market

Find out a healthy environment where you can learn

Questions?