*PC02: View on the Job*

1. Find examples of five different types of ICT organizations and describe the differences in culture.
   * **Google:** To have a peak in the culture within Google, the best way to understand is by looking at their hiring-process since this is an important part of their culture. Google cares deeply about their teams and the people who make them up. Creating a more representative and inclusive workspace begins with hiring and caring for their employees. In order to truly build for everyone, Google knows that they need a diversity of perspectives and experiences, and a fair hiring process is the first step in getting there. It is important to Googlers to have a meaningful career where they can grow and thrive along with the company. To be part of Google they value self-reflection a lot and give you a visualization exercise. This exercise consist of the questions bellow. Google doesn’t only hire on skills but hire on your enduring passions, your distinct experiences and perspectives. That is what a true Googler should be.

* What is something you learned that made everything that came after easier?
* Have more of your achievements come as a result of solitary effort or teamwork?
* What do you enjoy more, solving problems or pushing the discussion forward?
* What was the most rewarding job you ever had? Why?
* Describe the best team you ever worked with. What made that experience stand out?
  + Macaw:

Over the past 25 years, Macaw`s culture has been shaped by a unique combination of a systems integrator and a digital agency. Characteristics are craftsmanship, dedication, taking the challenge, wanting to be the best and not being satisfied until their customer is successful. Macaw`s employee’s are professional and passionate professionals, tech saviors, design talents, data nerds and social toppers who love challenges. They are more than a contractor, they act as a partner and challenge you. Macaw has a people-oriented culture with attention and care for their employees, their development, vitality and work-life balance. Their core values are; Excellence, Passion, Innovative, Ownership and Fair. Their motto? Challenge accepted.

* + ASML:

ASML knows that a great idea can come from anyone, so they foster a melting pot of different backgrounds, talent and passions. They are proud of their diversity. ASML are guided by their values. Challenge; they bravely challenge boundaries and question the status quo because they believe that tomorrow can always be better than today. Collaboration; They collaborate to tap into their collective potential. Together with their ecosystem of customers, partners and stakeholders they expand their knowledge and skills, learn form each other and share approaches to create the best solution for ASML as a whole. Caring; As an industry leader, they act with integrity and respect, realizing that their impact extends beyond technology to people, society and the planet. they take personal responsibility to create a safe, inclusive and trusting environment where people from all backgrounds are encouraged and enabled to speak up, contribute, make mistakes, learn and grow.

* + Microsoft:

We will only achieve our mission if we live our culture. We start with becoming learners in all things—having a growth mindset. Then we apply that mindset to learning about our customers, being diverse and inclusive, working together as one, and—ultimately—making a difference in the world. Microsoft believes that giving is a part of who they are. They employees are passionate about giving time, money and skills to address the issues facing our world. Giving is ingrained in their culture. It is how they live their mission to empower every person on the planet to achieve more. Microsoft is dedicated to diversity. They don’t just value difference, they seek them out and invite them in. They bring together people from across the globe and different walks of life.

* + VeraCode:

We work hard to create an environment where employees experiment, learn, imagine, play, create, and treat each other kindly. What does that look like?

* + Training & Development: As a growing company, there are plenty of opportunities for career growth. We offer formal and informal training, and development opportunities ranging from mentorship, conference attendance, classroom training, and online training courses to help you reach your career goals.
  + Charity Involvement: Our goal is to help our customers change the world by achieving their bold missions with secure software. But Veracoders are changing the world every day. We raise money for multiple causes, give back to our communities around the world, and help drive security education so we can continue making the world a better and more secure place.
  + Hackatons: Veracode knows amazing innovations can come from anyone at any time. That's why we host a bi-annual hackathon to allow everyone in our organization a chance to move outside their comfort zone and find new ways to drive customer value and help advance the AppSec industry.

1. Try to find out what different types of IT roles these companies have and give 5 examples.
   * Google:

Software Engineer: your work is at the core of everything we build. Develop massive, complex software systems that scale globally. Java/C/C++, C#, objective C, Python, Javascript.

Data Scientist: Analyze data to build solutions and make recommendations that improve our business and products. Python, SQL.

Network Deployment Engineer: Deploy and design Google`s networks.

Software Engineer, Site Reliability Engineer: Work at the intersection of software and systems engineering to design, build, and run large-scale systems scalably, reliably and efficiently. Telecommunications, OSP,ISP,AC/DC power systems.

Security/Privacy Engineer: Hack Google… if you can. Work on finding security flaws, building secure infrastructure, or ensuring data privacy as part of a diverse engineering team. Javascript, HTML, Java applications and design patterns, UI desing.

Operations Engineer: Install, test, and maintain hardware and systems software for Google`s data centers.

* + Macaw:

Data science: Use smart mathematical models to achieve valuable results for your organization. Python.

Customer Data Platform: Optimize your channels and get a 360 degree customer view with a Smart Data Platform. With this, the customers offers the right offer, at the right time, through the right channel.

Power BI for the Enterprise: Continuously monitors business processes, behavior and status overviews through the use of advanced data tooling.

Digital Marketing: Automate your systems so that you get to know your active target groups better and respond more intelligently to the needs of your customer.

Conversion Optimization: Make smart use of available information and systems to increase online and offline conversion.

Security cloud engineer:

* + ASML:

Design Engineer: you are the hands-on/experienced data engineer that can implement and maintain complex Big Data architechtures. C,C++, Python

Software Development Tools Specialist(DevOps): Maintain and modify the implementation of tools and way of working for several software development environments, in co-operation with departmental architects and the internal customer. Unix, Linux, Python, C++/C#

Data Leakage Prevention Specialist: Primarily responsible for monitoring and analyzing Data Leakage Prevention(DLP) incidents to ensure compliance with company policies; understanding a variety of security and compliance policies and incident response processes

Software Industrialization Engineer: You represent the customer support and factory manufacturing sector in the product and process development. In this role you secure the product meets the required assembly cycle time and field availability. You ensure the product and process design is as such that your colleagues at our factory and at our customers sites are able to optimally manufacture and service our complex equipment.

IT-Network & ICS Security Expert: The IT Network and ICS Security Specialist is responsible to assess the cyber security risk upon Network, Datacenter and ICS systems on an ongoing basis, initiates dialogues andtake steps to reduce this risk towards an acceptable level.

Data scientist: Matlab, R and Python

* + Microsoft:

Data Platform Engineer: Responsible for designing, contributing, building functionality, planning and executing software and effectively communicating complex ideas.

IT Service Operations Manager: Build, develop and lead high performing teams of Services & Operations Engineers to design & implement modern infrastructure and services to support big data platform & analytics capabilities

IT Solution Manager: Lead design framework and help architect Data solutions to support Microsoft’s business, resulting in actionable roadmaps thru deep understanding of key business scenarios to define clear requirements. Develop and implement optimized processes & instrumentation to enable best-in-class customer service.

IT Service Operations: Supporting escalated issues of all customers through various support modalities (ie. Phone, chat, etc). Effectively communicating with customers and stakeholders via, phone, email or any other available   means. Scoping and documenting customer scenarios, potential causes and troubleshooting steps.Leverage the people and resources put at your disposition to speed the resolution of the customers issue.

Debugging, troubleshooting, and taking responsibility to see that the issue is fully resolved.Ensuring compliance with schedules; processes and MS policies and values.

Software Engineer:

* Design and develop search and platform features
* Operate and manage live site for substrate search service
* Collaborate with the team on building a highly scalable and high performance search stack
* Collaborate with customers and partners to understand user requirements and design features to enable rich search experiences
* C++/C#/ Java.
  + VeraCode:

Senior Software Engineer – Full stack: Serve as full stack developer on the team to develop new features. Design and develop REST APIs to support dynamic product line. Develop scalable, high available system, monitor the production environment, and identify any issues emerging to improve performance of the system.

Senior Software Engineer – Data Engineer: Create and maintain software applications for Veracode products in the Data Engineering and Analytics arena. Design and implement complex units, modules, and products that meet functional and business requirements for Veracode in-platform business analytics solution. Implement and troubleshoot solutions that involve core Amazon Web Services (AWS) cloud products. Architect and lead implementation of serverless Data Lake and scalable pipelines in AWS cloud.

* Lead Data Architect: The Data Architect is an expert in the field and serves as the lead architect for all primary aspects of data architecture within engineering. Deep knowledge of frameworks and methodologies for working with large data sets, such as HADOOP, Apache Spark, and NoSQL databases;
* Principal Software Engineer (DevOps): Provide enterprise architectural guidance for cloud computing, Infrastructure as a Code (IAC), cloud governance, disaster recovery, cost management, multi region automation, high availability, backup, and recovery. Responsible for project delivery, performance tuning of enterprise applications, and hybrid cloud infrastructure.
* Principal Software Engineer (Microservices): Participate in the expansion and scaling of security analysis product from private data center to public cloud. Participate in design discussions and write well-designed, testable, performant, and high-quality code. Write technical documentation. Lead and provide technical guidance to senior and junior members of a scrum team to understand and implement the team's deliverables.
* Senior Software Engineer – Full Stack (Dynamic): Serve as full stack developer on the team to develop new features. Design and develop REST APIs to support dynamic product line. Develop scalable, high available system, monitor the production environment, and identify any issues emerging to improve performance of the system.

Java applications, SGL, Hibernate, AngularJS, Javascript, spring boot Framework.

1. Find out the different technologies they are working with and describe them.
   * Google:
   * Macaw:
   * ASML:
   * Microsoft:
   * VeraCode:
2. Add pictures which make your findings and ideas on the IT profession more visual. Do not forget to cite your images.
   * Google:
   * Macaw:
   * ASML:
   * Microsoft:
   * VeraCode: