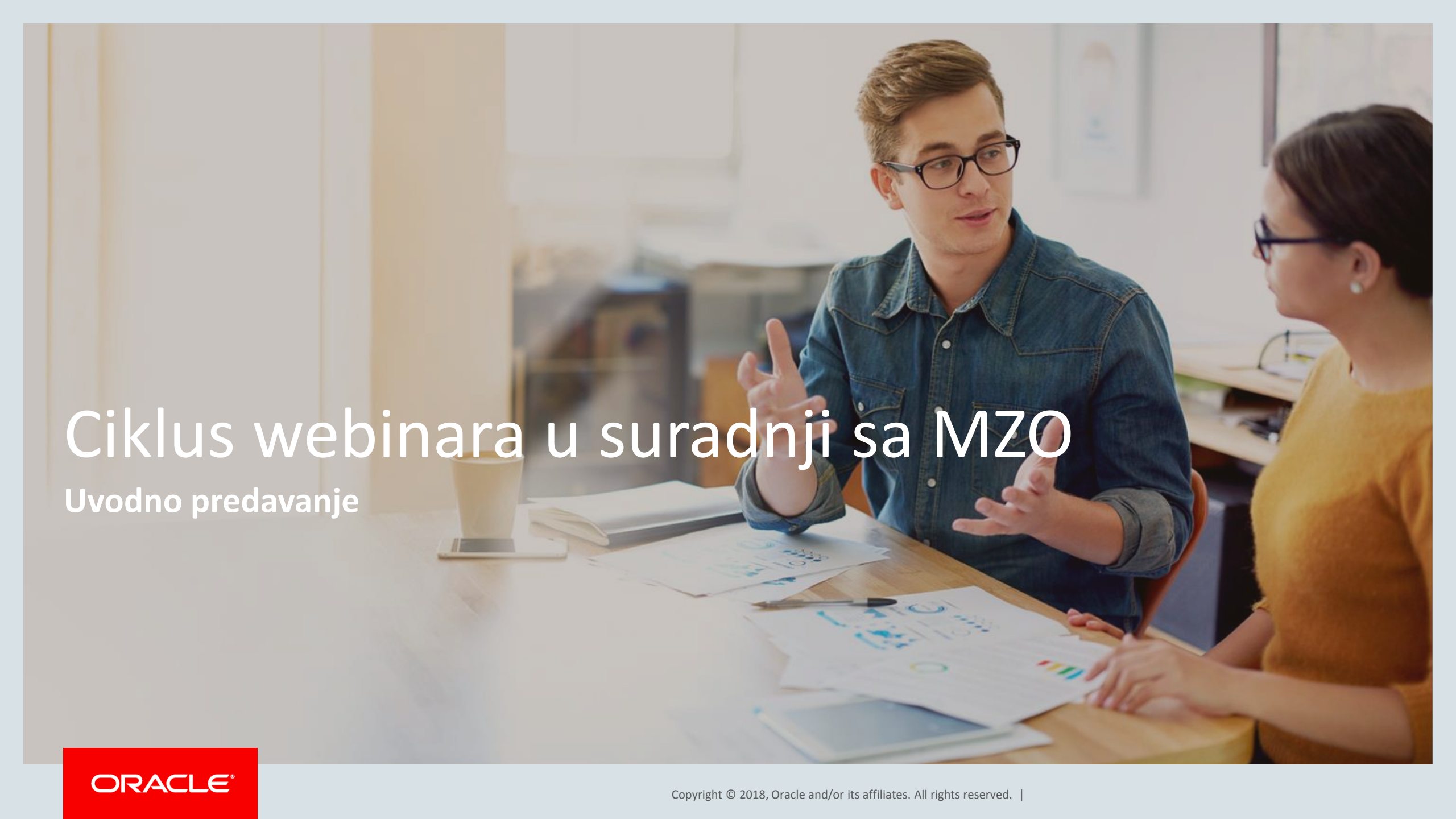


ORACLE®

A man with glasses and a denim shirt is speaking and gesturing with his hands while sitting at a table. A woman with glasses and a yellow top is listening to him. On the table are several documents with charts and graphs, a coffee cup, and a smartphone. The background is a blurred office setting.

Ciklus webinaru u suradnji sa MZO

Uvodno predavanje

O predavaču



Darko Jureković,
Voditelj programa Oracle Academy
(za BiH, Hrvatsku, Češku, Estoniju,
Latviju, Litvu, Mađarsku, Poljsku,
Slovačku i Sloveniju)

Osnovno o programu Oracle Academy



Potpora **poučavanju i učenju** programiranja te o informacijskim tehnologijama.



BESPLATAN program za obrazovne ustanove, učitelje i nastavnike te učenike



Podupiremo oko **15.000** obrazovnih ustanova sa oko **6.3 milijuna studenata** u **128 država**.

Osnovno o ovom ciklusu webinarara

Uvodno predavanje (današnje)

Predavanja vezana uz programiranje u Javi

Programski jezik Java - uvod

Programski jezik Java - kako učenicima olakšati ulazak u svijet objektno-orientiranog programiranja: Alice i Greenfoot

Programski jezik Java - zašto je najrašireniji i najtraženiji programski jezik današnjice

Programski jezik Java - pogled iz perspektive hrvatske IT tvrtke

Predavanja vezana uz baze podataka

Uvod u doba velikih podataka (Big Data)

Autonomne baze podataka

Računalstvo u oblaku (Cloud)

Umjetna inteligencija (AI) i "digitalni asistenti"

Uvod u Blockchain

Rudarenje podataka i poslovna inteligencija – znanja i vještine za poslove budućnosti

Zaključno predavanje

Svjetski trendovi i IKT

Kuda ide ovaj svijet?

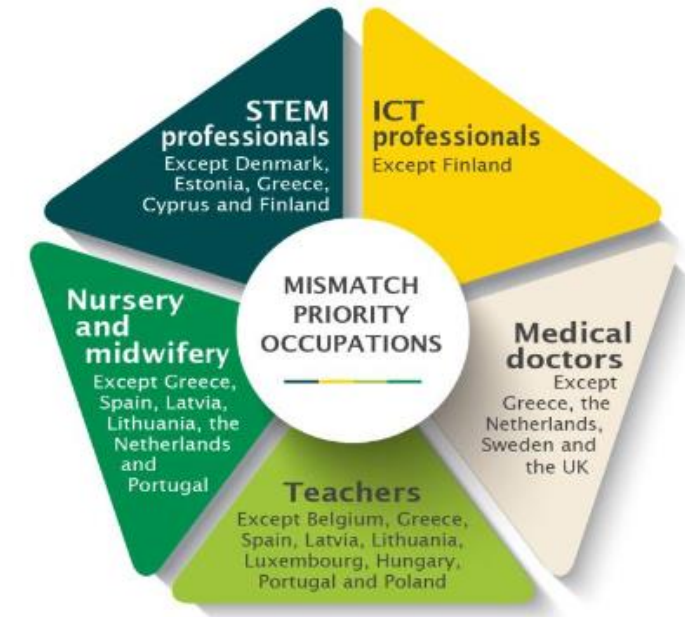
Two long-standing trends lie at the root of country's demographic problem. One, **medical science has dramatically increased life expectancy.** ... Compounding any strain from this unprecedented dependency, **medical science and changing customs have at the same time greatly reduced birth rates.** ... **With fewer young workers to support an ever-larger retired population, the economic and financial strains become harder to avoid.**

Even if the average retiree had ample savings to sustain himself or herself, which is hardly the case, those trends will leave the economy struggling to find enough workers to support the population's demands for goods and services. After all, retirees, though they have ceased active production, still consume.

4. The aging workforce will bring a talent shortage

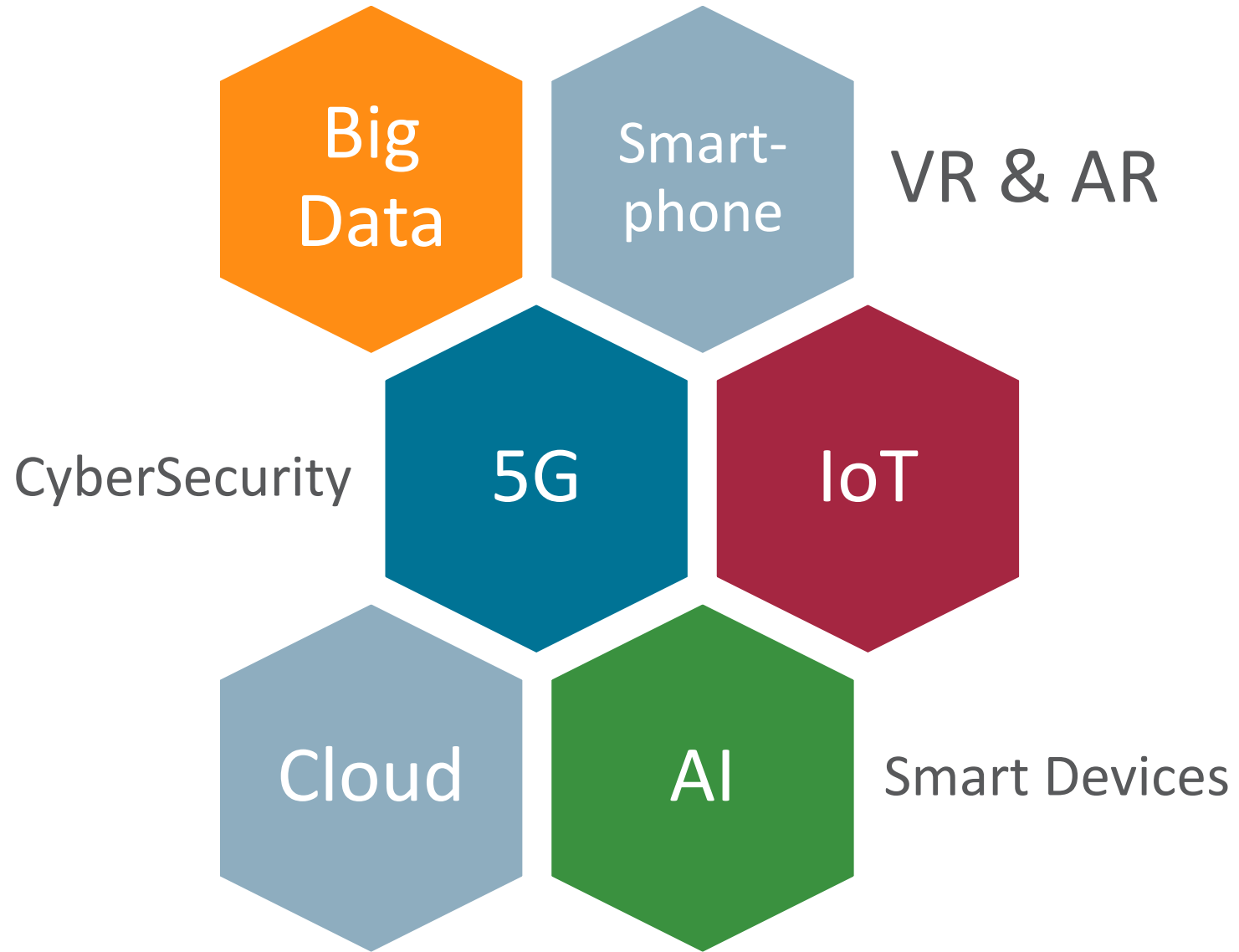
There are currently more than 7 million job openings in the US, with **not enough workers to occupy them**, the report found. A big reason for this shortage is America's aging workforce ... The result will be a smaller pool of experienced workers, and a complete overhaul of what American consumers will look like, according to the report.

FIGURE 1: TOP 5 MISMATCH PRIORITY OCCUPATIONS: SHORTAGES, EU-28



Source: Cedefop

The **increasing need for skilled labour across both developed and emerging economies** is leading to widening income inequality between the haves and the have-nots. 66 of 85 economies which we track will see an increase in income inequality between 2015 and 2030. **Education is a key differentiator.** We can see how this plays out in India, where the incomes of highest-earning 10% of households really drive income growth in the country.



„Oblak” omogućava

- Skalabilnost
- Isplativost
- Povećanu sigurnost

Internet stvari (IoT – Internet of Things)

Međusobno povezani uređaji (npr. pametni telefoni, vozila ili kućanski uređaji) koji komuniciraju i razmjenjuju podatke

Značaj „velikih podataka“ je u „4V“

- **Volumen**

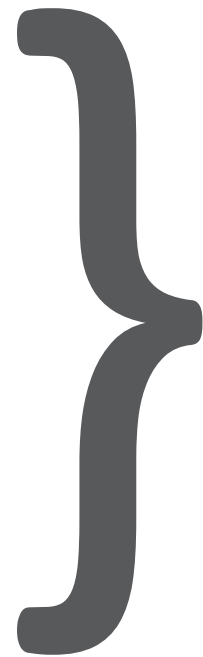
(obujam)

- **Velocity**

(brzina)

- **Variety**

(raznovidnost)



Value

(vrijednost)

Umjetna inteligencija

Sposobnost uređaja da prate događanja u svojoj okolini i prilagođavaju im se kako bi uspješno izvršili postavljene im zadatke

Strojno učenje

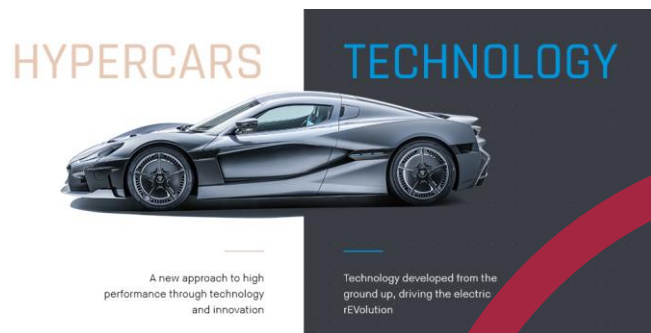
Sposobnost uređaja da samostalno detektiraju i otklanjaju kvarove

Autonomna baza podataka

Primijenjeno strojno učenje
koje povećava sigurnost
podataka (od napada ili
ljudske pogreške)

IKT se mijenja, ali mijenja i čitave industrije i gospodarske grane

IKT se mijenja, ali mijenja i čitave industrije i gospodarske grane



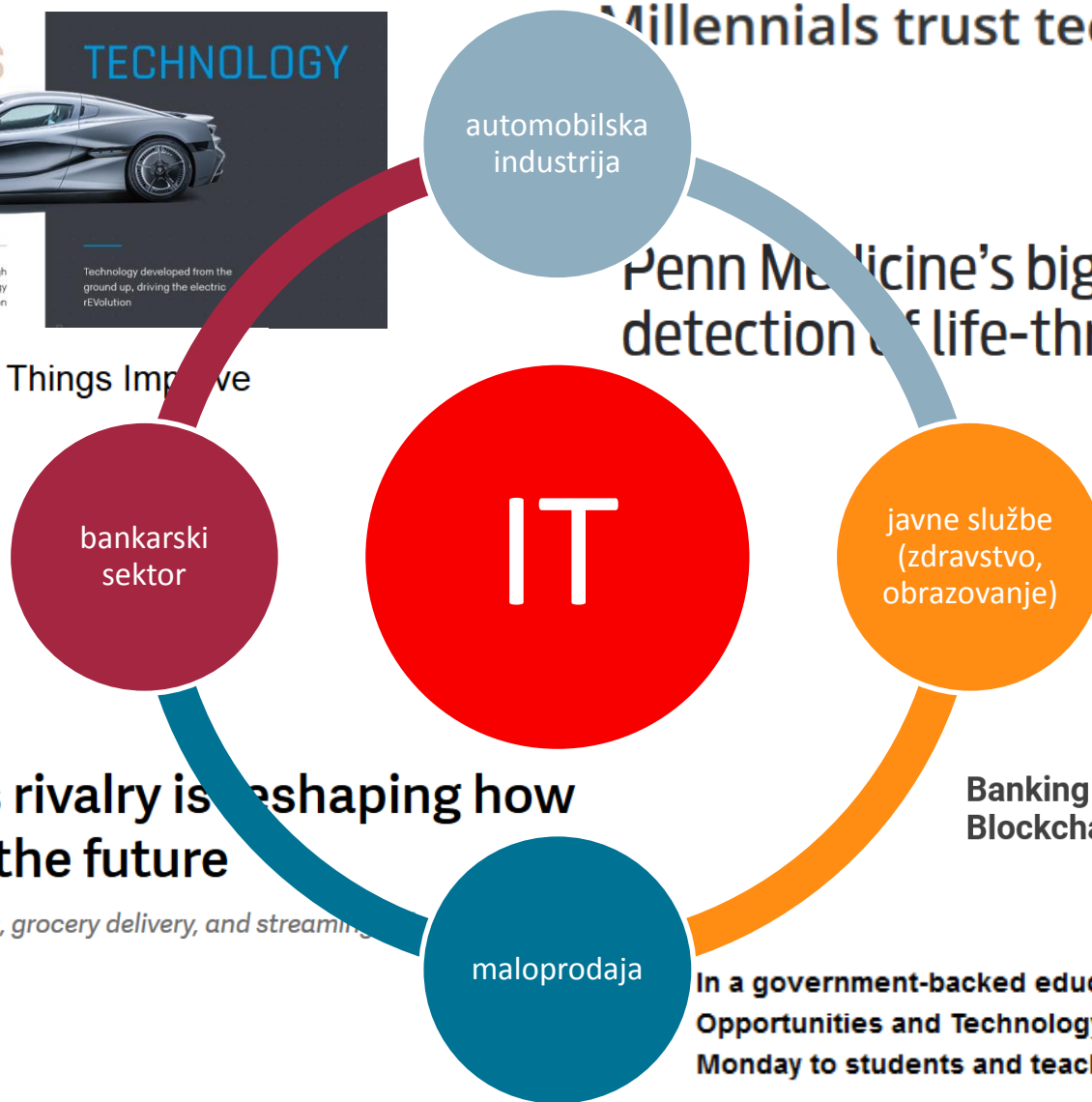
How Big Data And The Internet Of Things Improve Public Transport In London

Amazon and Walmart's rivalry is reshaping how we'll buy everything in the future

The retail war is expanding to cloud computing, grocery delivery, and streaming.

Millennials trust tech firms more than banks

Penn Medicine's big data system triggers early detection of life-threatening infections



Banking Is Only The Beginning: 50 Big Industries Blockchain Could Transform

In a government-backed education project called the Movement to Increase Opportunities and Technology (FATİH), 100,000 tablet PCs were distributed on Monday to students and teachers across Turkey.



Trendovi i zapošljivost

Procjenjuje se kako će 2025 godine, 60% poslova u IT industriji biti oni koji danas još ne postoje!

Software Development

171,484 ▲ 0.35

Top job titles per click

Software Engineer	1,412,121
Front End Developer	564,161
Quality Assurance Engineer	514,056
Developer	506,271
Full Stack Developer	430,737
Product Manager	418,805
Web Developer	391,679
Development Operations Engineer	346,033
Software Architect	342,275
Senior Software Engineer	326,158

Top search terms per click

software engineer	435,556
web developer	269,570
software developer	226,616
front end developer	138,294
product manager	133,036
java developer	125,432
devops engineer	103,470
java	101,905
developer	93,871
computer science	83,676

Information Design & ...

75,775

▲ 0.09

Top job titles per click

Data Analyst	1,401,035
Business Analyst	1,329,601
Quality Assurance Analyst	725,886
Operations Analyst	374,500
Business Systems Analyst	323,942
IT Security Specialist	322,791
Technical Writer	312,923
Systems Analyst	291,779
Technical Specialist	288,826
Information Technology Specialist	261,677

Top search terms per click

business analyst	449,817
data analyst	426,048
analyst	294,810
information technology	182,592
it	104,264
technical writer	94,613
cyber security	91,673
sql	62,801
financial analyst	62,176
qa analyst	59,284

Cleaning & Sanitation 89,240 ▼ -0.06	Community & Social ... 111,998 ▲ -0.07	Construction 55,500 ▲ -0.13	Customer Service 184,574 ▼ -0.32	Dental 18,829 ▲ -0.01
Driving 196,110 ▲ -0.99	Education & Instruction 131,590 ▲ -0.02	Electrical Engineering 15,161 ▲ -0.05	Food Preparation & S... 408,846 ▲ -0.4	Hospitality & Tourism 14,890 ▲ -0.05
Human Resources 46,147 ▲ -0.07	IT Operations & Help... 37,601 ▼ -0.14	Information Design & ... 75,775 ▲ -0.09	Installation & Mainten... 286,066 ▲ -0.82	Insurance 20,519 ▲ -0.02
Legal 25,845 ▲ -0.06	Loading and Stocking 96,430 -	Logistic Support 15,971 ▲ -0.04	Management 387,159 ▼ -2.13	Marketing 49,338 ▼ -0.03
Mathematics 12,045 ▲ -0.03	Mechanical Engineering 13,408 ▲ -0.06	Media & Communicati... 16,717 ▲ -0.01	Medical Information 31,571 ▼ -0.02	Medical Technician 140,753 ▲ -0.15
Nursing 345,777 ▲ -0.2	Personal Care & Hom... 49,004 ▲ -0.25	Pharmacy 33,982 ▼ -0.04	Physicians & Surgeons 46,724 ▼ -0.09	Production & Manufa... 91,148 ▲ -0.26

Gdje je u čitavoj ovoj priči Oracle?

Tehnološki lider u ključnim područjima

1

Tehnologije

- Application Server
- Database
- Database on Linux
- Database on Unix
- Database Management Tools
- Data Warehouse
- Embedded Database
- Engineered Systems
- Middleware
- Structural Data Management Software

Aplikacije i primjene

- Applications Development and Deployment
- Business Analytics
- Deployment-Centric Applications Platforms
- Enterprise Performance Management
- Lead Management
- Marketing Automation
- Supply Chain Execution
- Talent Management

Industrije

- Banking
- Communications
- Engineering and Construction
- Financial Services
- Healthcare
- Insurance
- Life Sciences
- Logistics
- Public Sector
- Retail
- Utilities

Most Complete Industry Solutions

Companies across a broad range of industries get better results with Oracle

**AEROSPACE
AND DEFENSE**
10 of the 10 Top
AD Companies



AUTOMOTIVE
20 of the 20 Top
Auto Companies



CLOUD
10 of the 10 Top
SaaS Providers



COMMUNICATIONS
20 of the 20
Top Telcos



CONSUMER GOODS
9 of the 10 Top
CG Companies



**EDUCATION AND
RESEARCH**
20 of the 20 Top
Universities



**ENGINEERING AND
CONSTRUCTION**
9 of the 10 Top
EC Companies



**FINANCIAL
SERVICES**
20 of the 20
Top Banks



HEALTHCARE
20 of the 20 Top
Medical Device
Companies



HIGH TECHNOLOGY
20 of the 20 Top
HT Companies



INSURANCE
20 of the 20
Top Insurers



LIFE SCIENCES
20 of the 20
Top Pharmas



MANUFACTURING
20 of the 20 Top
Manufacturers *



OIL AND GAS
20 of the 20 Top
OG Companies



PUBLIC SECTOR
20 of the 20 Top
Governments



RETAIL
20 of the 20
Top Retailers



SUPPLY CHAIN
20 of the 20 Top
Supply Chains



**TRAVEL AND
TRANSPORTATION**
20 of the 20
Top Airlines



UTILITIES
10 of the 10
Top Utilities



* IndustryWeek list of largest publicly held manufacturing companies based on revenue.

Oracle tehnologije i IT tržište rada

20,448 views | Dec 11, 2017, 08:32pm

LinkedIn's Fastest-Growing Jobs Today Are In Data Science And Machine Learning



Louis Columbus Contributor

Summary

Quick Facts: Computer and Information Research Scientists	
2017 Median Pay	\$114,520 per year \$55.06 per hour
Typical Entry-Level Education	Master's degree
Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2016	27,900
Job Outlook, 2016-26	19% (Much faster than average)
Employment Change, 2016-26	5,400

Summary

Quick Facts: Software Developers	
2017 Median Pay	\$103,560 per year \$49.79 per hour
Typical Entry-Level Education	Bachelor's degree
Work Experience in a Related Occupation	None
On-the-job Training	None
Number of Jobs, 2016	1,256,200
Job Outlook, 2016-26	24% (Much faster than average)
Employment Change, 2016-26	302,500

Data Analyst, the most in demand job of the coming years

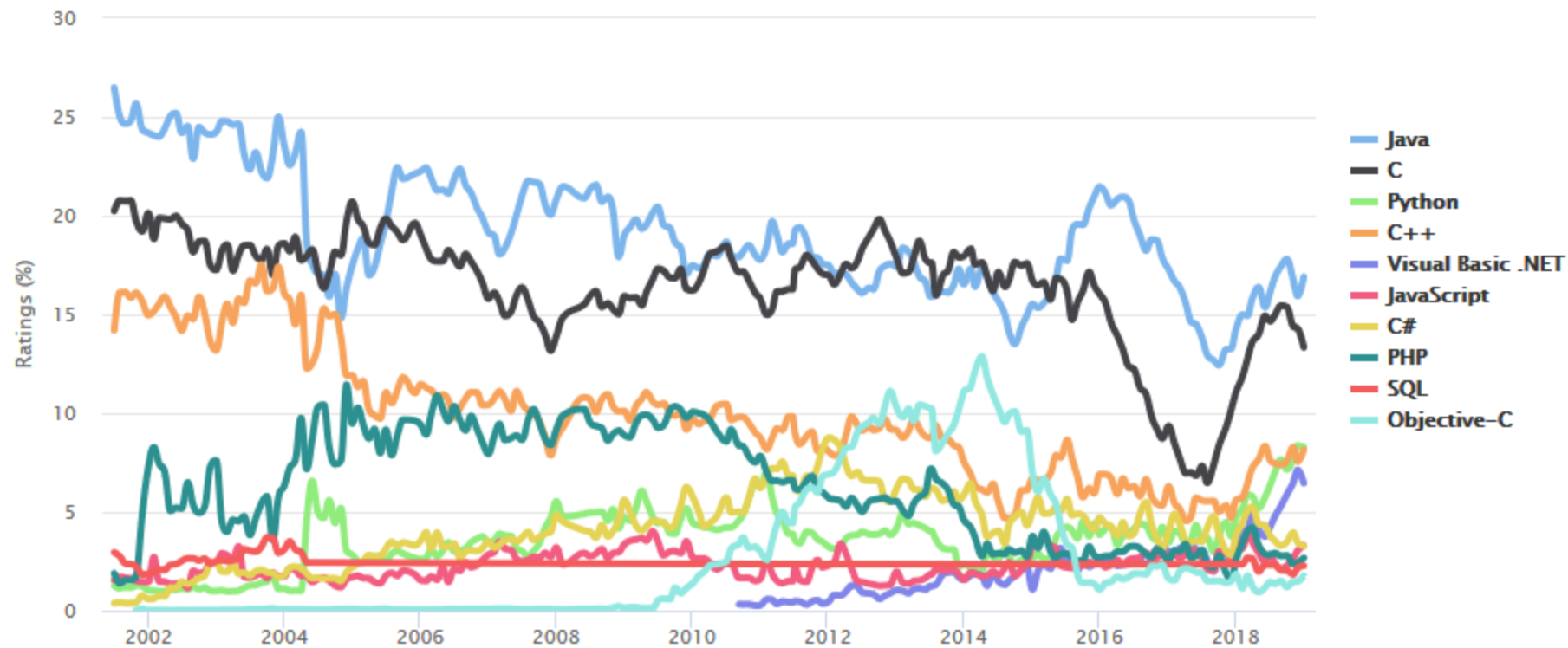
Data Analysts seek to understand the origin of data and any possible distortions through the use of technology, and many believe this will be the job of the future. Five SMEs out of ten declare they intend to hire one in the next three years.

A, zašto govorimo i o Javi?

Programming Language	2019	2014	2009	2004	1999	1994	1989
Java	1	2	1	1	14	-	-
C	2	1	2	2	1	1	1
C++	3	4	3	3	2	2	3
Python	4	7	5	10	20	21	-
Visual Basic .NET	5	11	-	-	-	-	-
C#	6	5	7	8	30	-	-
PHP	7	6	4	5	-	-	-
JavaScript	8	8	8	7	19	-	-
SQL	9	-	-	6	-	-	-
Ruby	10	10	10	22	-	-	-

TIOBE Programming Community Index

Source: www.tiobe.com



Jan 2019	Jan 2018	Change	Programming Language	Ratings	Change
1	1		Java	16.904%	+2.69%
2	2		C	13.337%	+2.30%
3	4	▲	Python	8.294%	+3.62%
4	3	▼	C++	8.158%	+2.55%
5	7	▲	Visual Basic .NET	6.459%	+3.20%
6	6		JavaScript	3.302%	-0.16%
7	5	▼	C#	3.284%	-0.47%
8	9	▲	PHP	2.680%	+0.15%
9	-	▲▲	SQL	2.277%	+2.28%
10	16	▲▲	Objective-C	1.781%	-0.08%

Resursi dostupni kroz program Oracle Academy

Oracle Academy je besplatan program koji obuhvaća:



Programska rješenja, treninge za nastavnike, nastavne materijale za nastavnike i studente, tehničku podršku te pogodnosti kod certifikacije



članove u **128** država

6,3+ M

studenata godišnje uključeno u program



pristup tehnološkim rješenjima koje su u podlozi različitih industrija

Ponešto o dostupnim resursima

Nastavni materijali:























- Java
 - Fundamentals
 - Foundations
 - Programming
- Databases
 - Foundations
 - Design and Programming with SQL
 - Programming with PL/SQL

Treninzi:

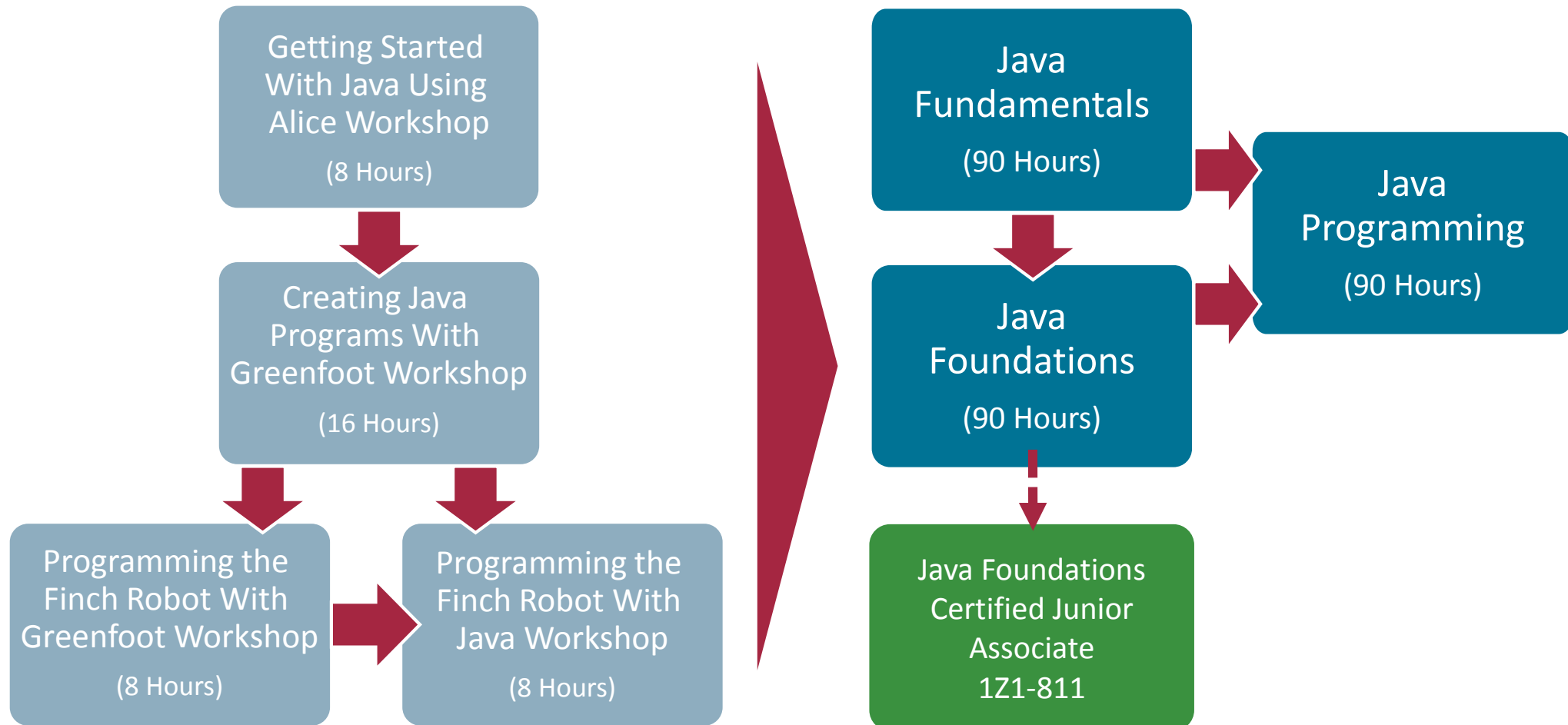
- Za nastavno osoblje
- Načini izvođenja:
 - U učionici - In-Class
 - On-line
 - Hibridno (dijelom u učionici, dijelom on-line)
- Min: 15 sudionika

Software

- Za lokalnu uporabu
- Za ustanove, nastavno osoblje i studente
- Nadilazi opseg tečajeva, obuhvaća i komercijalna rješenja (npr. Primavera)

Community	BADGES, LOGOS & MERCHANDISE 		ENGAGE WITH EXPERTS  		ORACLE OPEN WORLD & JAVA ONE  	
	Certification	CERTIFICATION PREPARATION & EXAMS		50% OFF Preparation		25% OFF Exams
Training		FACULTY PROFESSIONAL DEVELOPMENT			INDIVIDUAL LEARNING	
	Learning Resources	IN-CLASS TRAINING 	VIRTUAL + IN-CLASS TRAINING 	VIRTUAL INSTRUCTOR LED 	WORKSHOPS IN A BOX 	SELF-SERVICE RESOURCES 
Technology		CURRICULUM 	ORACLE PRESS BOOKS <i>Oracle Press</i>	LECTURE SERIES 	TECHNICAL ARTICLES 	WEBCASTS & PODCASTS 
	CLOUD ENVIRONMENTS 		JAVA DEVELOPMENT ENVIRONMENTS    			ORACLE SOFTWARE   

Osnovno o Oracle Academy tečajevima o Javi



Java Curriculum – platforme i alati



Alice



Greenfoot



**Java Using
Eclipse**

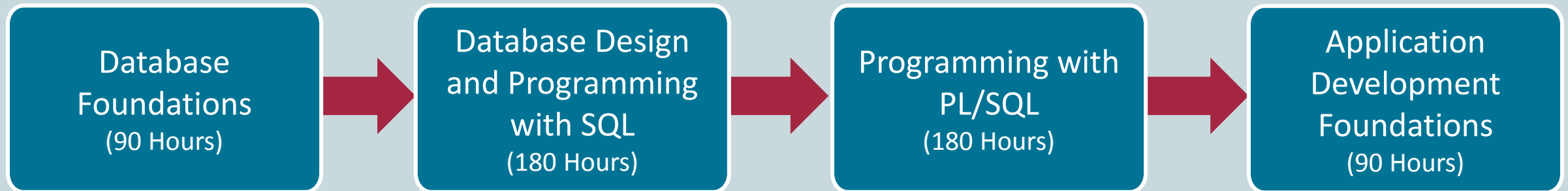


**Java Using
NetBeans**

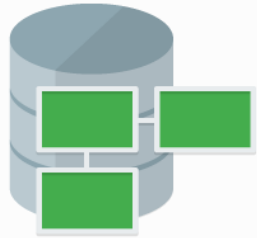


**Robotics
Programming**

Osnovno o Oracle Academy tečajevima o bazama podataka



Database Curriculum – platforme i alati



Oracle Database



**Application Express -
APEX**



**Programming with
SQL**



**Programming with
PL/SQL**

Novi sadržaji objavljeni u rujnu 2018

Oracle Academy Education Bytes

- Kratki sadržaji za samoučenje
- Tri formata:
 - Hands-On Labs,
 - Projects and Challenges
 - Videos and Presentations

Novi OA tečaj dostupan na iLearning:

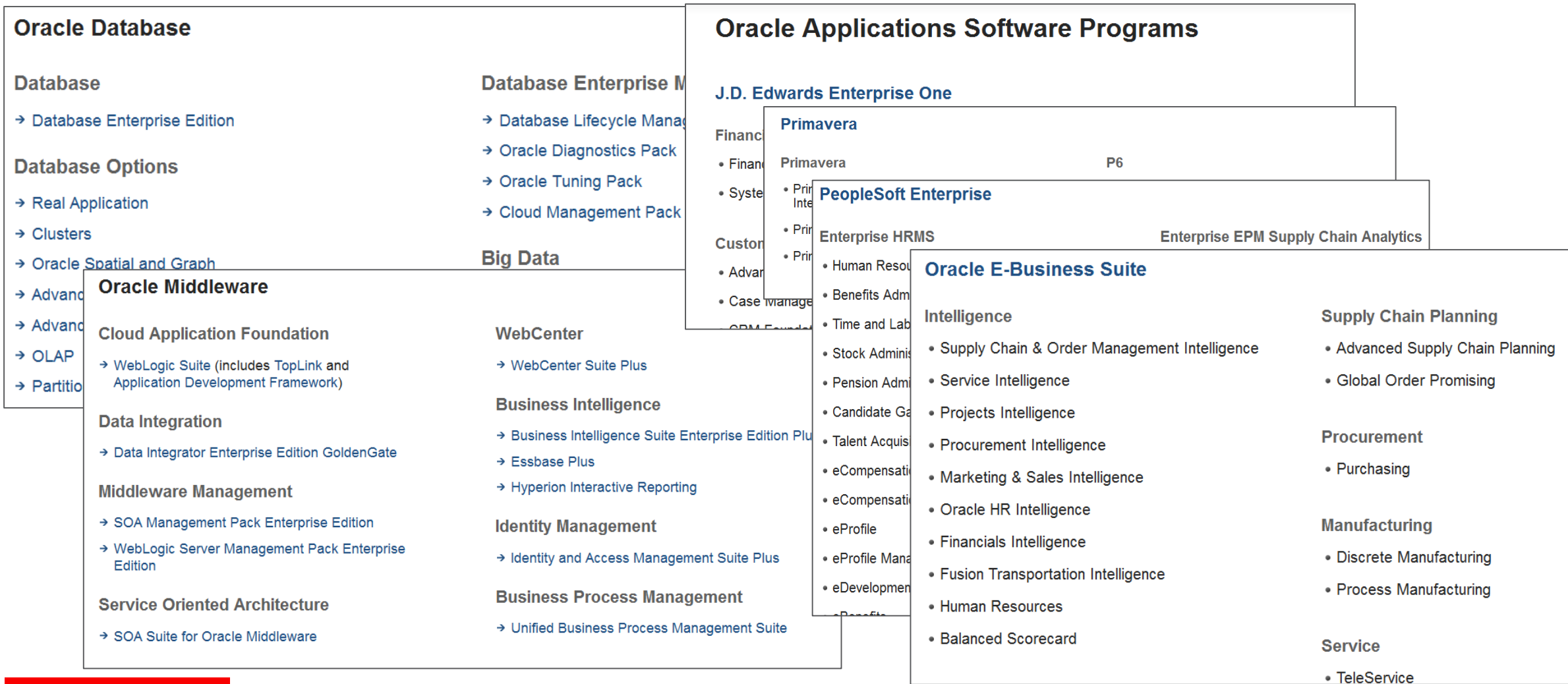
- Umjetna inteligencija i napredno (mašinsko) učenje

U suradnji sa: Oracle Global Startup Ecosystem

- Video materijali
- Namijenjeni „budućim poduzetnicima”
- Razgovori s uspješnim poduzetnicima, o njihovim uspjesima

Oracle software - besplatno

Za poučavanje te neprofitna, akademska znanstvena istraživanja



Softver za korištenje u učenju i poučavanju

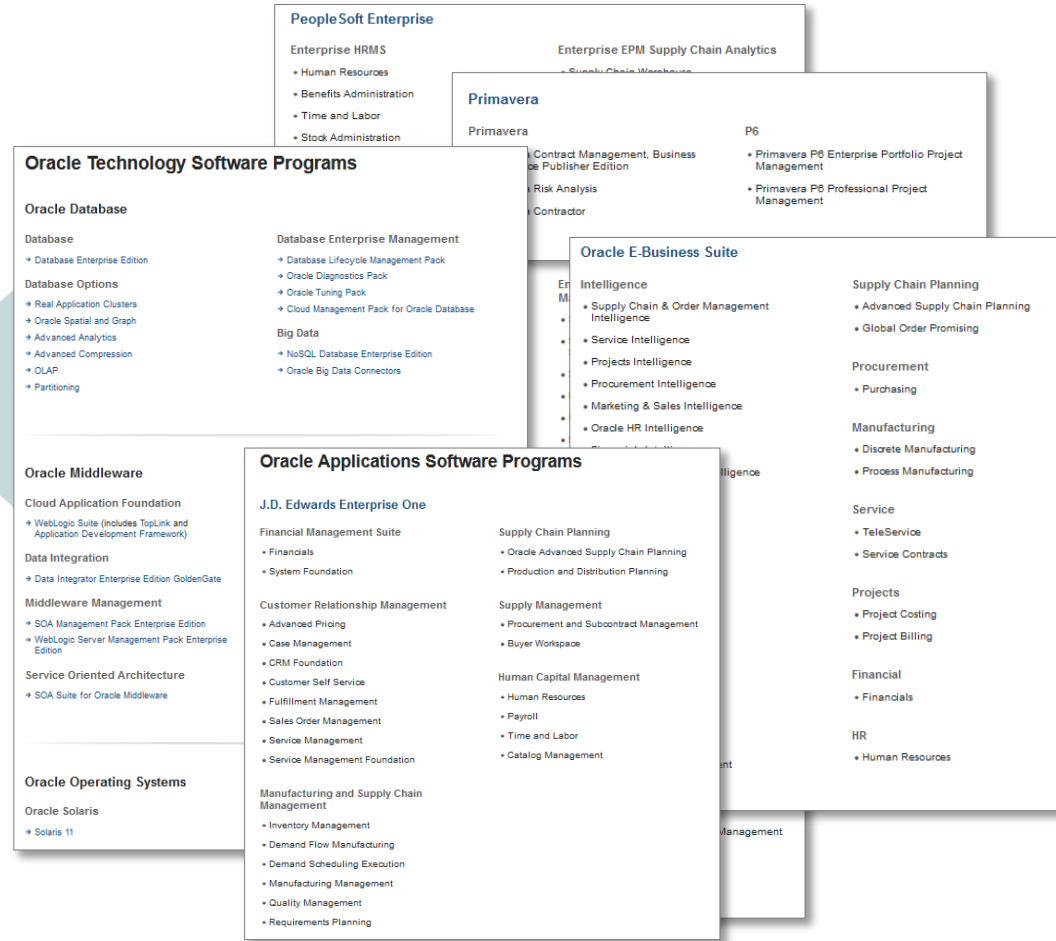
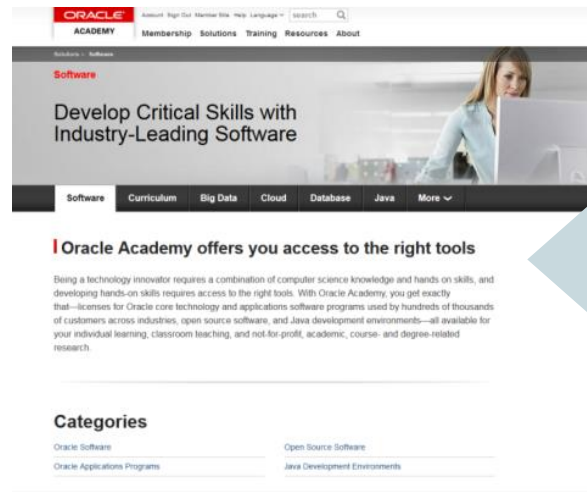
- Razvojna okruženja

The image shows two screenshots of Oracle software interfaces. The top screenshot is the Oracle Academy login page, featuring a 'Login' form with fields for 'Username' and 'Password', a 'Remember My Password' checkbox, and a 'Login' button. To the right, it says 'Welcome to Oracle iLearning' and provides instructions for Oracle University Knowledge Center subscribers and employees. The bottom screenshot is the Oracle Application Express dashboard. It has a navigation menu with 'Home', 'Application Builder', 'SQL Workshop', 'Team Development', and 'Administration'. Below the menu are icons for 'Application Builder', 'SQL Workshop', 'Team Development', and 'Administration'. The dashboard also includes a 'News' section, 'Top Applications', 'Top Users' (showing 'drue.swadener' with 13 users), and a 'Team Development' sidebar with metrics for Features, To do's, Milestones, Bugs, and Feedback. At the bottom, it shows 'Page events: 1 hours (Edit)' and 'Application Express 4.1.1.00.05'.



Softver za korištenje u učenju i poučavanju

- Aplikacije



Hvala na pozornosti!

Imamo li pitanja?

Pridružite nam se na sljedećem webinaru, koji će se održati 24. siječnja 2019. godine s početkom u 10:00 sati, a u kojem ćemo govoriti o „velikim podacima“!

ORACLE®

Academy