מילון מונחים טכנולוגיים
לאנשי גיוס ומשאבי אנוש

בשנים האחרונות יצא לי להדריך מעל ל 4,000 אנשי גיוס, משאבי אנוש ומנהלים על הדרכים למנף את לינקדאין ועל כלי הסורסינג המתקדמים (חיפוש בוליאני, X-RAY, שימוש בתוספים, איתור מועמדים ב GitHub ו Stack Overflow ועוד).

אחד האתגרים העיקריים שעמדו בפני הגיוס – בעיקר אלו שהגיעו מארגונים וחברות השמה לעולם הטכנולוגיה היה הפער בהבנת עולם התוכן המקצועי למשרות אליהן הם מגייסים.

הפער הזה פגע בתקשורת עם המנהל המגייס ועם המועמדים הטכנולוגיים שעבדו על שפות שונות ובחוסר יכולות לסנן בצורה מדויקת מועמדים טכנולוגיים.

כדי לעזור ולהתחיל להיכנס לעולם הטכנולוגי אני משיק פרויקט של בניית מילון מונחים טכנולוגי והכרה של התפקידים בתחום – ומצרף את הגרסה הראשונה שתתרחב עם הזמן..

המידע מבוסס על סריקה של מקורות קיימים ברשת באתרים בעולם ובניית מאגר מרוכז. בסוף החוברת יש הפניה לאתרים בהם נעזרתי כדי לרכז את המידע.

אנחנו מקיימים סדנה פרקטית בת 4.5 שעות להכרת עולם הטכנולוגיה המועברת ברובה על ידי איש טכנולוגיה מנוסה, יזם יוצא 8200 שמפתח תוכנה מילדות ומרצה מוערך.

למידע והרשמה לסדנה הקרובה: **http://hrd.ravpage.co.il/Technology-Recruitment**

A

ABAP (Advanced Business Application Programming)

High-level programming language created by the German software company SAP; ABAP and Java are the common languages used to develop on SAP products

Access

Access Software for creating and managing databases from Microsoft. Access is easier to use than many other database systems making it ideal for less-skilled users.

ActionScript

Open-source, OO language developed by Macromedia, Inc.; superset of the syntax and semantics of JavaScript used to develop websites and software that use the Adobe Flash Player platform.

Agile

Software development methodology based on iterative and incremental development; Solutions and requirements evolve through collaboration between self-organizing, cross functional teams; promotes adaptive learning, evolutionary development and delivery, a time-boxed iterative approach, and encourages a team's rapid and flexible response to change

AJAX (Asynchronous JavaScript and XML)

A web browser development feature that allows web pages to be more interactive and dynamic such that content can update without requiring manual page reloads. The "X" is a red herring, these days it's more common to use JSON than XML.

Amazon Web Services AWS

An Amazon-run service where a "cloud" of computers can be made available on-demand. This allows you to only pay for server capacity that you actually need when you need it. It includes Amazon Elastic Compute Cloud (EC2) and Amazon S3.

Android

A mobile operating system developed by Google. It is designed primarily for touchscreen mobile devices such as smartphones and tablets. recasting, and data mining

AngularJS

An open-source web application framework that addresses many of the challenges encountered in developing single-page applications. It aims to simplify both the development and the testing of such applications by providing a framework for client-side model–view– controller (MVC) architecture, along with components commonly used in rich Internet applications.

Ant

Open source build tool for automating software build processes; implemented using Java and uses ML to describe the build process

Apache

A widely-used free and open-source web server software. It is most commonly used on a Unix-like system, and the software is available for a wide variety of operating systems, including Windows, OS X, Linux, Unix, FreeBSD, Solaris, NetWare, OS/2, TPF, OpenVMS and eComStation.

Apache HTTP Server

Web server program written in C, developed by the Apache Software Foundation

API (Application Programming Interface)

A standardized module of program functionality that provides a specific service and can be re-used by multiple programs or developers.

Application Developer

A developer who writes standalone apps that run on desktop and laptop computers.

Applescript

Scripting language created by Apple Inc. and built into Macintosh operating systems; has some elements of objectoriented programming and natural language programming tendencies in its syntax, but does not strictly conform to either category

ASP (Answer Set Programming)

Form of declarative programming oriented towards difficult search problems;
Similar to Perl, Python, and PHP

ASP.NET (Active Server Pages on .NET Framework)

A framework for developing custom web server applications on Microsoft Server Platform. The term includes the original ASP.NET known as Webforms and the newer ASP.NET/MVC.

Assembly

Back end programming language typically used in a system's boot code, the lowlevel code that initializes and tests the system hardware prior to booting the operating system; an understanding of Assembly could be helpul for a C or C++ developer

AWK

Scripting language typically used as a data extraction and reporting tool; used on the Unix operating system

Augmented Reality (AR)

A subset of graphics programming and things like image recognition, pattern recognition, face recognition; machine learning is also not unlikely to be involved.

Azure

Microsoft's cloud service, a competitor to Amazon Web Services. This is essentially a similar platform to Amazon Web Services (AWS) and the google cloud offerings.

B

Back End Developer
A developer who focuses mainly on the server side of code for a web application. They are knowledgeable about databases, server internals, system administration and technologies used once a site reaches scale.

Bash Shell

Unix shell built as a free software replacement for the Bourne shell (and therefore sometimes referred to as "Bourne Again" Shell); default shell for Linux and Mac OS X

BI (Business Intelligence)

Applications that include the activities of query and reporting, OLAP (Online Analytical Processing), statistical analysis, forecasting, and data mining

Big Data

A buzzword for "data science" which means "working with very large amounts of data".

Bourne Shell

Unix shell; the default shell for Unix Version 7

Bug Tracking

A database or project management system for tracking program bugs.

Bug

A program defect or erroneous behavior

Build

Verb = the act of compiling programs from their source human-readable form into computer executable format.

Noun = the final executable output form itself as a "release."

C

C

A general purpose programming language used to program low-level applications for embedded applications, device drivers, operating system kernels, etc.

C#

A very common development language for ASP.NET platform. It is a general purpose language that is extensively used for Think Client (Silverlight) apps and Windows (WPF) apps.

C++

An object-oriented version of the "C" programming language, commonly used for developing desktop Windows and Linux applications. Competes with Java, C#.

CAD (Computer-Aided Design)

A combination of hardware and software that allows engineers to design a variety of objects.

Camping

Framework written in Ruby

Cascades

UI framework for Blackberry

Cassandra

Open source distributed database management system; NoSQL solution used to handle very large amounts of data

CI (Continuous Integration)

Practice aimed at preventing integration problems that merges all developer workspaces with a shared mainline several times a day

ClearCase

Family of software tools that support SCM (software configuration management) of source code and other software development assets; supports two kinds of use models: UCM (Unified Change Management) and base ClearCase

Cloud

A service of another company managing your hardware. Using a cloud service means you don't own your own physical hardware, and you can add or remove servers on-demand without much up-front cost.

COBOL (Common Business-Oriented Language)

One of the oldest programming languages used in business, finance, and administrative systems for companies and governments

Cobra

Open source, general-purpose, OO programming language that runs on the Microsoft .NET and Mono platforms, and is strongly influenced by Python, C#, Eiffel, and Objective-C

Cocoa

One of the Apple technologies, is a programming API for OS X.

Code Coverage

An analysis method that determines which parts of the software have been executed (covered) by the test case suite and which parts have not been executed and therefore may require additional attention.

Codec (Short for "Coder Decoder")

A device or program that converts signals or content from one form to another. Additionally, it may be used to refer to a standard that does such activities in a standard way. MP3 is an Audio CODEC for example.

ColdFusion

An Enterprise Web Development Framework sold by Adobe Systems used for developing Web applications.

Content Management Systems (CMS)

A database for content storage that is intended to help manage workflow and version tracking of content. Usually used as a way to have multiple people contributing to the content of a particular web-site and track all those revisions and history.

CSS (Cascading Style Sheets)

A way to describe the presentation and formatting semantics separate from the actual textual content in HTML pages.

D

Database

A collection of data stored in a computer in such a way that a program or a webpage can easily find, select, and/or manipulate the desired data. Typically, databases are organized by fields, records and tables. A field is one piece of data, a record is a collection of fields, and a table is a collection of records.

Database Administrator

A developer who has exceptional knowledge of the internal workings of a database server. Their primary roles are ensuring data integrity, backup, and performance efficiency.

Data Modeling

The analysis of data objects that are used in a business or other context and the identification of the relationships among these data objects.

DBMS (Database Management System)

Software for creating, reading and writing to a database.

Debian

Operating system composed of open source software packages; one of the most popular Linux distributions

Debugging

The process of finding and removing the causes of software failures.

Deployment

The process of moving compiled code (and other items - such as images, CSS, documentation etc…) from development to production. Common to web applications.

Developer

A person who solves technical problems and implements them primarily by writing software. Developers must be able to write working code.

Development Environment

The set of programming tools used to create software.

DevOps ("Development + Operations")

A software development practice that emphasizes close collaboration between software developers and other operational teams like system administrators, or a person who specializes in a hybrid developer-sysadmin role. Contrast this against the traditional model still in use at most companies called "waterfall", where Developer and Operations are given conflicting priorities and collaboration isn't encouraged.

Django

An open-source web framework written in Python.

Dreamweaver

A web development application. Used to create and manage web page content and applications.

Drupal

A free and open source Content Management System that is written in PHP.

E

Eclipse

An Integrated Development Environment used to write Java code.

Eiffel

OO language that emphasizes declarative statements over procedural code; often compiled into C

ETL (Extract, Transform, Load)

Process in database usage and data warehousing that involves: extracting data from outside sources, transforming it to fit operational needs, and loading it into the end target

F

Flash

An Adobe proprietary multimedia platform for adding animation, video and various forms of interactivity to web applications. Normally realized as a downloaded application that runs via web browser client-side plug-in. Many Flash developers are proficient in ActionScript.

Flash Builder 4

An interactive development environment for build Adobe FLASH applications. See Flash.

Flex

Earlier versions of Flash Builder. See Flash Builder 4.

Frameworks

Reusable set of libraries or classes used to develop applications and products; include support programs, compilers, code libraries, tool sets, and APIs

Front End Developer

A developer who focuses mainly on the part of the application that runs in the browser. They work directly with HTML, CSS and JavaScript.

Full Stack Developer

A developer that can get a website live on the internet all on their own. Requires the use of many technologies, including a database, operating system configuration (OS), server configuration, a server framework, HTML, CSS and JavaScript.

G

Git

A distributed source control system, where everyone who clones a project gets the complete history of it. It is possible to develop locally without any dependency on a central server.

GitHub

A website for hosting source code in Git. It is the most common place to share and collaborate on open source projects, and can also be used to host private repositories for companies.

GO / golang

Open source language designed for fast compiling and efficient garbage-collection (automatic memory management); syntax is similar to C;

Gradle

Project automation tool that builds upon Ant and Maven designed for multi-project builds that can grow fairly large and supports incremental builds; associated languages include Java, Groovy, and Scala

Groovy

OO language used for scripting on the Java platform; a dynamic language with similar features to those of Python, Ruby, and Perl

H

High-level Programming Language

A programming language that's designed to be easier to read and use. Provides more abstractions from the details of how computers work, may include natural language keywords (e.g. making some code read like English prose). Examples: Ruby, Python, C#.

Hadoop

An open-source big data framework written in Java.

HTML (HyperText Markup Language)

The language used to specify the content of web pages.

HBase

Open source, non-relational, distributed database, modeled after Google's BigTable and written in Java; it runs on top of HDFS (Hadoop Distributed Filesystem)

HDFS (Hadoop Distributed File System)

File system written in Java for the Hadoop framework

HTML (HyperText Markup Language)

Main markup language for creating web pages and other information that can be displayed in a web browser;

HTML elements form the building blocks of all languages

HTML5
Fifth revision of HTML which contains new syntactic features that were not previously available and was built with the consideration of being able to run well on mobile devices

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I

IDE
Stands for Integrated Development Environment. A software application that helps developers write code. Examples include Eclipse and Visual Studio.

iOS
A mobile operating system created and developed by Apple for Apple hardware. It presently powers many of their mobile devices, including the iPhone, iPad and iPod touch.

IIS (Internet Information Server)
A software used to serve web site pages. Runs on Microsoft Windows Server.
Illustrator
A vector graphics based editor, Adobe Illustrator. This program allows graphics to be created using lines and various structured objects. Alternatively, Adobe Photoshop operates at the pixel level.

Intranet
A company's network - not usually accessible from outside company premises, though sometimes such access is available via a VPN (see VPN).

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J

J2EE (Java 2 Platform, Enterprise Edition)
Platform-independent, Javacentric environment for developing, building and deploying Web-based enterprise applications online

Java
An object-oriented programming language that is associated with a write-once run-anywhere philosophy. Java applications can be run securely on any platform.

JavaScript
A programming language most commonly used for client-side web browser based applications to build interactive and dynamic web page content. However, its popularity in server-side programming has been increasing lately; see "node.js". This has no association with Java.

JBoss
Application server written in Java that implements Java EE; recently renamed "Wildfly"

Jenkins
Open source CI (Continuous Integration) tool that is written in Java; forked from Hudson and supports SCM tools including CVS, Git, Perforce, SVN (Subversion), Mercurial, and ClearCase

JMS (Java Message Service)
API that sends messages between 2 or more clients; part of the Java EE platform

Joomla
A free and open source Content Management System (CMS) for web servers written in PHP.

jQuery
A cross-browser JavaScript library designed to simplify the client-side scripting of HTML. It is the most popular JavaScript library in use today.

JRuby

Ruby language interpreter that is written in Java; allows full two-way access between the Java and Ruby code

JSON (JavaScript Object Notation)
A lightweight way to move data for web applications. It's intended as a more efficient alternative to XML when the sophistication of XML is not needed.

L

LAMP (Linux, Apache, MySQL, and Perl/PHP/Python)
A fully free and open source technology stack usually used for development of Web Applications on Linux platforms. LAMP is a competitor to Microsoft ASP.NET stack with Microsoft SQL Server.

Lean Programming

A concept that emphasizes optimizing efficiency and minimizing waste in the development of a computer program; the concept is also applicable to all enterprise practices. The concept originated in manufacturing and is also known as the Toyota approach.

Linux

A computer operating system assembled under the model of free and open-source software development and distribution. The word Linux is used to describe a whole family of operating systems, the best known of which are Ubuntu, Fedora, CentOS, and Debian.

Low-level Programming Language

A programming language that provides few abstractions and allows programs to be written that resemble hardware instructions. This allows for code that is potentially harder to read but runs faster than a high-level counterpart. Examples: Assembly, C

M

MapReduce

Programming model for processing large data sets

Maven

Build automation tool that is primarily used for Java projects

Merb (Mongrel+Erb)

Model–view–controller web framework written in Ruby

Magento

An open-source E-commerce content management system written in PHP.

Mobile Developer

A developer who typically writes programs for smartphones and tablet computers using iOS, Android, or Windows Phone (less common).

Mongo

Open source, documentoriented database that is part of the NoSQL family of databases; written in C++

MongoDB

A cross-platform, document-oriented database which makes the integration of data in certain types of applications easier and faster. Belongs to the family of NoSQL databases.

MVC (Model View Controller)

A design pattern for creating a separation of concerns where the user interface is separated from the data and business logic of the application.

MySQL

A relational database management system that is a popular choice for use in web applications. It is a central component of the LAMP open source web application software stack.

N

NET Framework

A software framework developed by Microsoft that runs primarily on Windows. Programs written for the .NET Framework are most commonly written in C#, but can also be written in Visual Basic .NET, F# and several other languages. Microsoft has recently released the .NET framework under an open-source license.

node.js

An open-source, cross-platform runtime environment for server-side and networking applications. Node.js applications are written in JavaScript.

NoSQL Database

A database that provides a mechanism for storage and retrieval of data that is modeled in means other than the tabular relations used in relational databases. NoSQL databases are increasingly being used in big data and real-time web applications. NoSQL databases are often contrasted with more traditional relational databases like MySQL, Postgresql, MSSQL and Oracle. Also called "a key-value" database because given a key (the item being looked up), the value (answer) is found.

O

Object-Oriented Programming

A programming model where data and code is combined together into a logical abstraction. A type of programming that helps improve the structure of programs so that common elements in the code

could be structured more like the real world "objects" they represent. Many modern programming languages are object-oriented, including Java, C#, Python, Perl, Ruby, PHP, Objective-C and Swift.

Objective-C

An object-oriented version of the "C" programming language, commonly used on Apple platforms including Mac OS X and iOS for iPhone and iPad. Apple's answer to C++. Also see "Swift", which was created by Apple in 2015 and which has a good chance of mostly replacing Objective-C in the long run.

Open Source

A program whose source code is made available for use or modification as users or other developers see fit. Other terms used are "Free Software" and "Libre Software" (less common) and the acronyms OSS, FOSS, and FLOSS; the difference between these terms is mostly philosophical.

P

Perl

Family of high-level, general purpose, dynamic programming languages that borrows features from C, Shell Scripting, AWK, and sed; been nicknamed the "Swiss Army chainsaw of scripting languages" because it is flexible and powerful

Photoshop

A photo editing software made by Adobe.

PHP

A scripting type programming language with many powerful libraries. This language is commonly used to develop web server applications, especially on open source platforms such as Linux.

Postgres

A free and open object-relational DBMS. Used for storing and management of data via SQL. Competitors include Microsoft SQL, MySQL, Oracle, etc.

Puppet

A configuration management solution that allows you to define the state of your IT infrastructure, and then automatically enforces the desired state. It is primarily used on Linux and Unix systems. Competitors include Chef, Ansible, SaltStack, etc.

Python

An object-oriented programming language commonly used for web development and scripting applications.

R

R

OO, free software programming language widely used among statisticians and data miners

Rackspace Cloud, EC2, S3

An example of cloud-based computing and cloud based storage applications.

Redis

Open source, networked, in memory, key-value data store, often referred to as a data structure server since keys can contain strings, hashes, lists, sets and sorted sets

Ruby

A dynamic, reflective, object-oriented, general-purpose programming language.

Ruby on Rails

An open-source web application framework written in Ruby. Ruby on Rails is a MVC (model-view-controller) framework, which provides default structures for a database, web service and webpages.

S

SAN/NAS (Storage Area Network/Network Attached Storage)

Dedicated devices and infrastructure for management of data intensive applications.

Scala

An object-functional programming language for general software applications. Scala source code is intended to be compiled to Java bytecode, so that the resulting executable code runs on a Java virtual machine.

Scrum

A development process that emphasizes writing software in short, iterative "sprints". The person responsible for facilitating the process is called the Scrum master.

SharePoint

Software platform and an online collaboration tool developed by Microsoft

SiteCore

A web-based content management system written in C#.

Source Control

A database that tracks changes to software source code. Common source control systems include Git, Subversion, Team Foundation Server and Mercurial (source).

SQL (Structured Query Language)

A (mostly) standardized syntax for accessing and updating data in a database management system (DBMS). Common SQL databases include MySQL, Postgresql, Microsoft SQL Server (MSSQL) and Oracle.

Stack

The core set of technologies used to implement solutions. Generally companies that describe their stack are web development companies because most standalone app and mobile developers use a much smaller set of tools. A product has a specific stack, but a company can use different stacks for different products.

Swift

A modern programming language created by Apple for iOS and OS X development.

System Administrator (sysadmin)
A person responsible for building and maintaining server infrastructure.

T

Titanium

A cross-platform mobile development kit -- the idea is that when using it you don't need specific knowledge of iOS/Android/Windows Phone to write apps for all three.

U

Unit Testing

A method by which individual units of source code are tested to determine if they are fit for use. A unit is the smallest testable part of an application. The goal of unit testing is to isolate each part of the program and show that the individual parts are correct. A unit test provides a strict, written contract that the piece of code must satisfy.

UNIX
An early operating system developed in the C programming language. Many current operating systems such as Linux and Mac OS X are based on UNIX.

User Interface (UI)

The human interface aspect of a computer application or device. The user interface is what the end user/human sees and uses.

UX ("User Experience") Developer

A developer that is responsible for the design and workflows of the user-facing part of the application.

V

VBA (Visual Basic for Applications)

The programming environment used to develop application on top of the Microsoft Office Suite such as Word, Excel, and PowerPoint.

VB (Visual Basic)

A Microsoft Programming language. See VBA.

VB.NET (Visual Basic .NET)

A version of Visual Basic that runs on the .NET framework and Runtime.

VB6 (Visual Basic Version 6)

A legacy Microsoft version of the BASIC programming language.
Version Control Systems

See Source Control

VHDL (VHSIC Hardware Description Language)

HDL (Hardware Description Language) used in the automation of electronic design to describe mixed-signal and digital systems

Visual Studio

An Integrated Development Environment used to write .NET code.

VPN

Stands for Virtual Private Network. It extends a private network across a public network, such as the Internet.

W

WCF Web Services (Windows Communication Foundation)

An API under Microsoft .NET for creating service oriented applications in a distributed environment.

Web developer

A developer who works on applications that run in the browser.

WebSocket

Web technology which defines an API establishing "socket" connections between a web browser (client) and a server

Weka

Suite of machine learning software that is written in Java

Windows CE (Windows Embedded Compact)

Operating system that Microsoft licenses out to OEMs and device makers; designed WinCE for embedded systems

WordPress

A web-based Content Management System (CMS) typically used for blogging. Written in PHP.

Wowza Media Server

A commercial server built for efficiently delivering rich media streaming content over the web – like videos, images or audio files.

WSDL (Web Services Description Language)

XML-based interface description language used to describe the functionality offered by a web service

X

Xcode

An IDE that contains a suite of software development tools developed by Apple for OS X and iOS.

XHTML (Extensible HyperText Markup Language)

Family of XML markup languages that mirror versions of HTML

XML (Extensible Markup Language)

A set of standard rules and syntax for encoding any type of structured data. XML is commonly used as a data interchange format in web applications and various document types.

XAML (Extensible Application Markup Language)

A Microsoft flavor of XML used in .NET development of desktop or rich client applications with WPF and Silverlight.

מי אנחנו?

חברת HRD עושה מהפיכה בדרך שבה ארגונים מגייסים עובדים על ידי הטמעה של כלים פרקטיים ופורצי דרך לאיתור וגיוס עובדים בצורה חדשנית.

בשנים האחרונות **הכשרנו מעל ל-5000** מקצועני גיוס ומנהלים מכ 1,000 הארגונים המובילים בישראל, שחוזרים שוב ושוב לקחת חלק בפעילויות שלנו.

הלקוחות שלנו **חסכו מליוני שקלים** והצליחו לאתר ולגייס עובדים שלא היתה שום דרך להגיע אליהם בדרכים אחרות בעזרת השימוש בכלים שרכשו אצלנו.

הסדנאות שאנו עורכים:

1. סדנת לינקדאין פרקטית לגיוס עובדים (סדנה חיצונית או בתוך הארגון)
   http://www.hrd.co.il/linkedinworkshop/

2. סדנת לינקדאין וסורסינג למתקדמים כדי להגיע למועמדים שאחרים לא מגיעים אליהם
   http://www.hrd.co.il/advanced-linkedin/

3. סדנת גיוס טכנולוגי להכרת עולם התוכן והטרמינולוגיה למגייסים טכנולוגיים
   http://hrd.ravpage.co.il/Technology-Recruitment

המקורות מהם נאסף המידע במילון המונחים:

- The Ultimate Tech Glossary for Recruiters & HR Managers – Stack Overflow
- Technology Glossary for Recruiters & Human Resource Managers – Adapto
- glossarytech.com
- Technology Glossary for Recruiters – Gild
- כתבות ומאמרים נוספים בתחום הטכנולוגיה