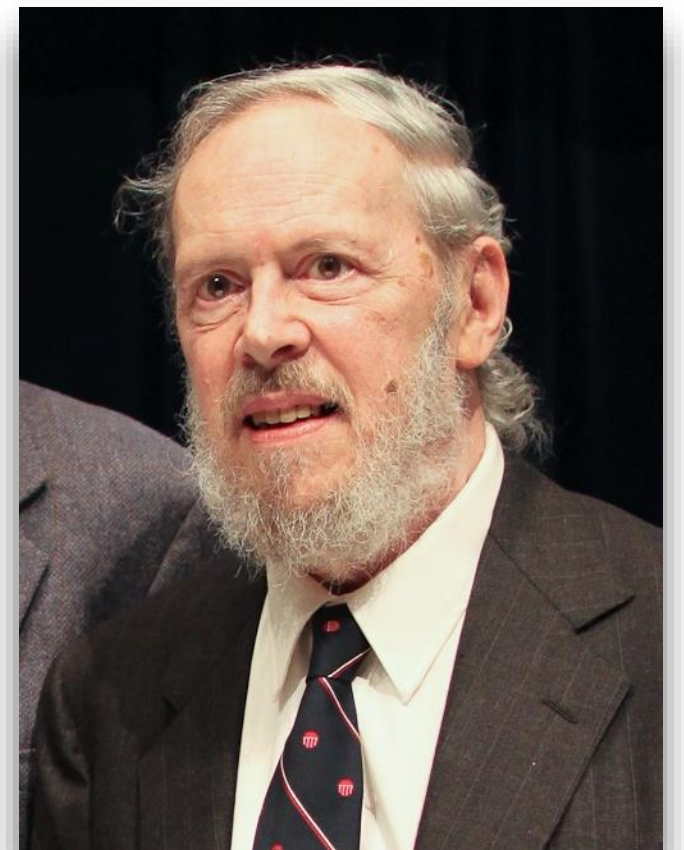


“The only way to learn a new programming language is by writing programs in it.”

– Dennis Ritchie (1941 – 2011)



MATLAB – From Zero to Hero



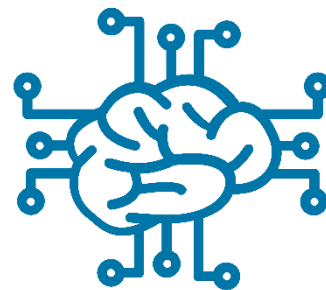
Jousef Murad
B.Sc. Mech. Eng.



@jousefm2



@jousefmrd

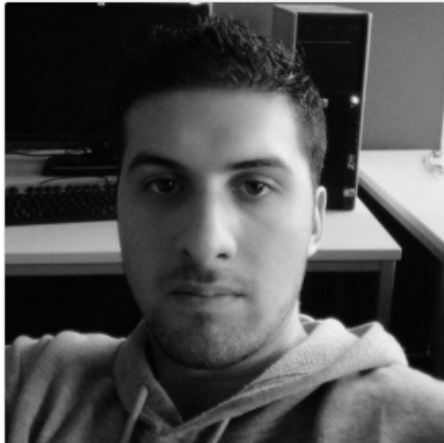


engineered-mind.com

Github



github.com/jousefm/



Deep Learning

jousefm

★ PRO

Edit profile

B.Sc. Mech. Eng. - Gadgeteer - Machine Learning/AI Enthusiast

Engineered-Mind

Karlsruhe

<https://www.engineered-mind.com/>

Overview Repositories 9 Projects 0 Stars 2 Followers 4 Following 2

Popular repositories Customize your pins

LBM-1

Lattice Boltzmann Method for Kármán Vortex Street and Lid Driven Cavity

C++ ★ 2

Linear-Stability-Analysis-Poiseuille

Stability Analysis for Plane Poiseuille Flow

MATLAB ★ 1

resolvent

Forked from mluhar/resolvent

Repository for all Matlab/Python code for the Navier-Stokes Resolvent analysis

MATLAB ★ 1

Matlab-Cheat-Sheet

Matlab Cheat Sheet

★ 1 1

CFD

Forked from donlimon/CFD

fracstep

C++

50DaysOfML

My journey in Machine Learning & AI

85 contributions in the last year

Contribution settings

Planned Series

MATLAB Fundamentals

- What is MATLAB? **Today!**
- Basics (Arithmetic, Data Types, Conventions, Special Values)
- Special Operations (Relational, abs/sign ...)
- Scripts
- Function

Git & Shell ?

MATLAB Intermediate

- Vectors
- Matrices
- Save & Load Data
- Functions
- Conditional Statements
- Loops

MATLAB Advanced → Simulink

- Debugging
- Symbolic Mathematics
- Solve Differential Equation
- Simulink
- Advances Examples (Lotka-Volterra Equations, Spring Pendulum...)

Prerequisites



Questions & Comments




- Social Media Channels
- Comment Section
- Q&A Videos (Instagram) / (Twitch)





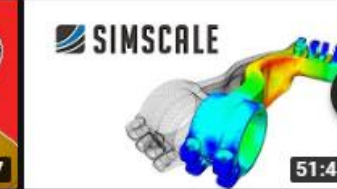
Subscription & Notification


THE OFFICIAL CHANNEL OF

TheEngineer

Engineer your mind

 JOUSEFM2  JOUSEFMRO  THEENGINEER


    



TheEngineer
354 subscribers

[CUSTOMISE CHANNEL](#) [YOUTUBE STUDIO \(BETA\)](#) [CSV EXPORT](#) [ADD COMPETITOR](#)


[HOME](#) [VIDEOS](#) [PLAYLISTS](#) [CHANNELS](#) [ABOUT](#) [TRENDING](#) [STATS](#)




My Engineering Degree in 15 Minutes
TheEngineer • 695 views • 1 month ago • 98%

► Become my Patreon: <https://www.patreon.com/theengineer> ► Skillshare teaches you the skills needed to succeed in today's and future's economy: <https://skillshare.eqcm.net/nZPaA> ► An elegantly


Uploads [PLAY ALL](#)




Be part of my journey! | What is Patreon?
157 views • 2 weeks ago • 90%




#AI - Neuralink Presentation with Elon Musk | Reaction
410 views • 3 weeks ago • 97%




My Engineering Degree in 15 Minutes
695 views • 1 month ago • 98%



SimScale Workshop KIT | IPEK | Q&A #1
349 views • 1 month ago • 94%

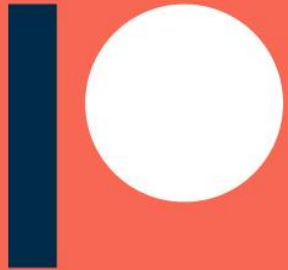


Intro.
283 views • 1 month ago • 100%



SimScale - Intro Workshop Exercise | Summer Semeste...
918 views • 3 months ago • 68%

Subscription







patreon.com/theengineer

WELCOME TO THE OFFICIAL PATREON PAGE OF

TheEngineer




Engineer your mind

 JOUSEFM2  JOUSEFMRD  THEENGINEER



TheEngineer
is creating videos on engineering topics, psychology & self-development.

0 PATRONS

Share Follow

Overview Posts

- Bachelor of Science in Mechanical Engineering
- Finite Element Analysis
- CFD & Turbulence Modelling
- Python Programming
- Interested in AI
- I raise heavy objects against the force of gravity.

For a better world. My goal is to inspire 1 million people. More information about me can be found at: www.engineered-mind.com

RECENT POSTS BY THEENGINEER

Become a patron

TIERS

Baby-Patreon
\$1 or more per month

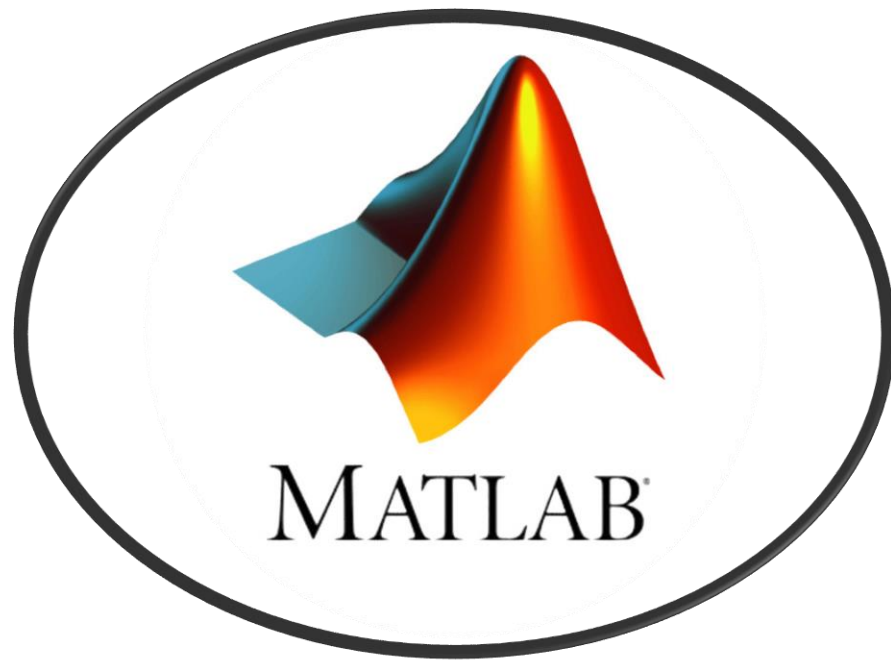
[Thank you very much! :\)](#)

- Basic support if you just want to show your appreciation

Learning Objectives

- You know what MATLAB is
- You know how to install MATLAB on your machine
- You know what MATLAB can be used for

Let's get started!



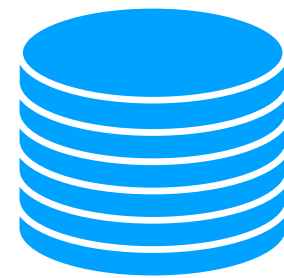
High-Level Programming Language



Easy to Read



Dynamic



Multi-Paradigm

The History of MATLAB

- MATLAB = MATrix LABoratory
- Developed late 1970s by Cleve Moler
- Alternatives for LINPACK & EISPACK to avoid FORTRAN
- Initial release 1984 by MathWorks

What is MATLAB used for?

- Data Analytics
- Robotics
- Mechatronics
- Image Processing and Computer Vision
- Control Systems
- Embedded System

Next Video

- MATLAB's Graphical User Interface (GUI)
- How to use the Help
- MATLAB's documentation