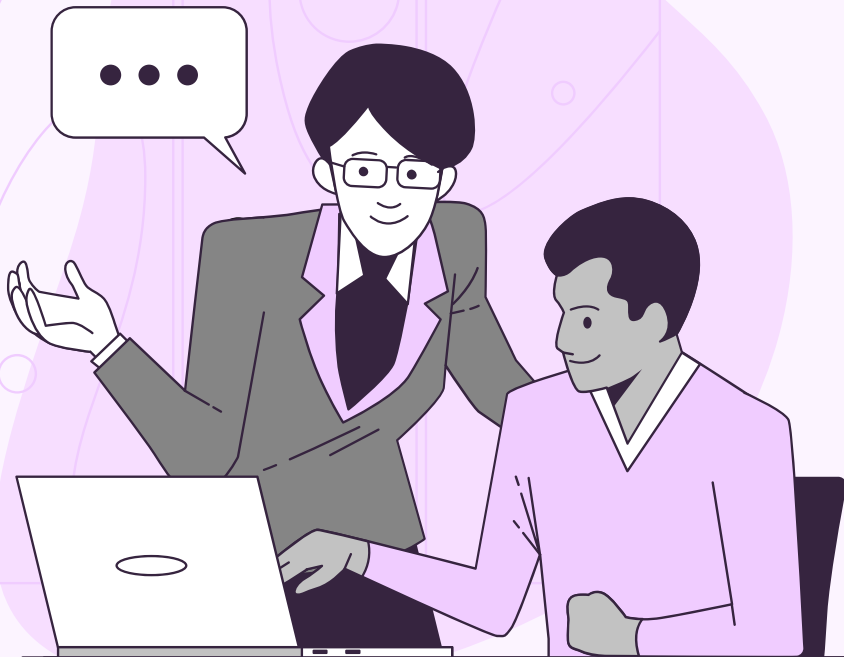




# Sharif EE Department

A concise introduction





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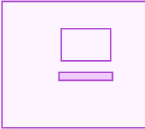
## Industrial collaborations

Knowledge-based products and companies

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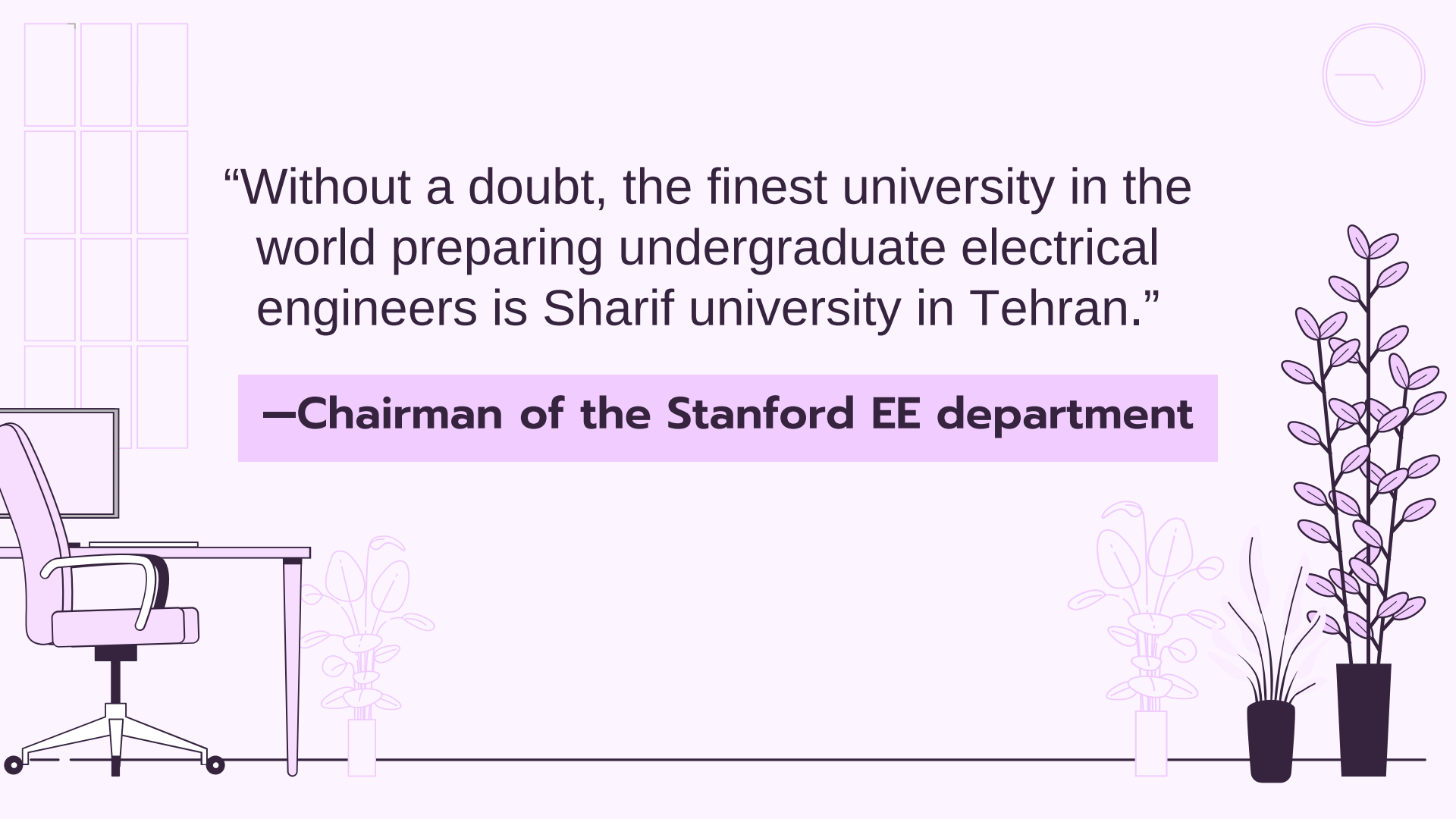
Scientific associations and guild councils





# Sharif EE Department



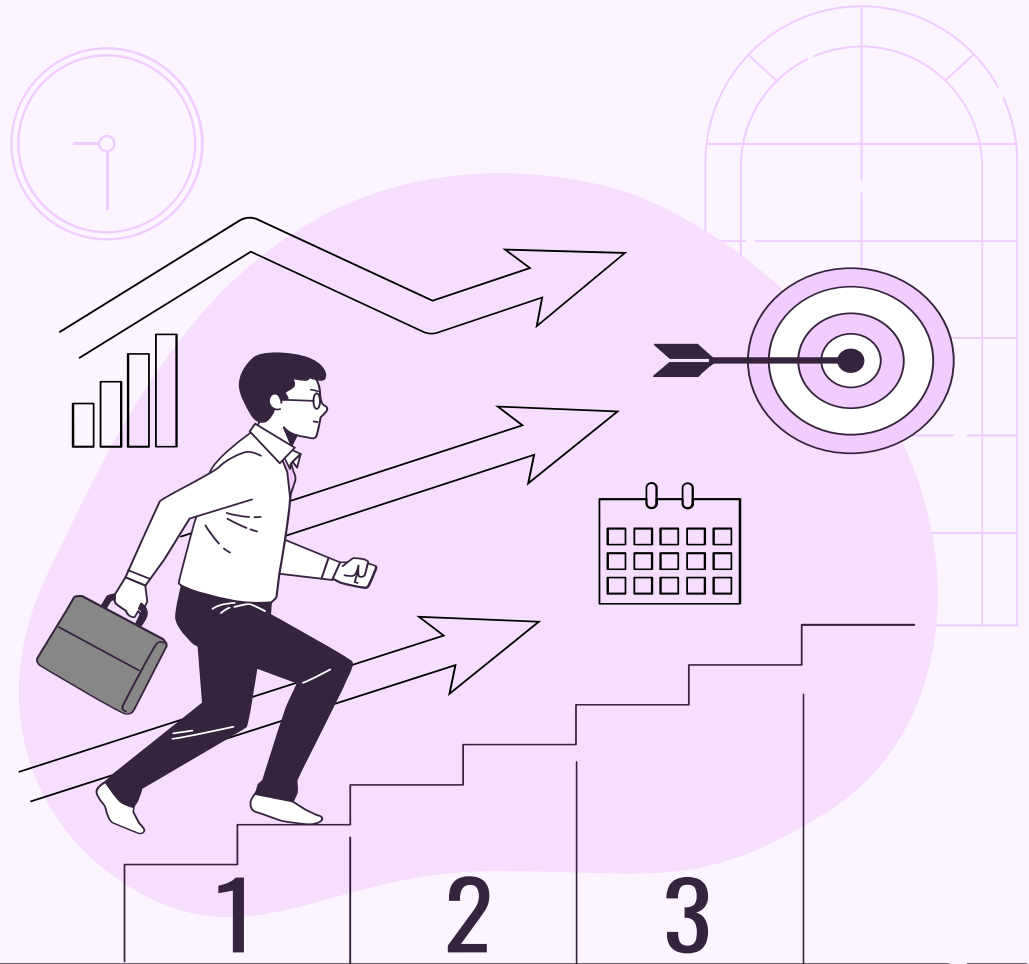


“Without a doubt, the finest university in the world preparing undergraduate electrical engineers is Sharif university in Tehran.”

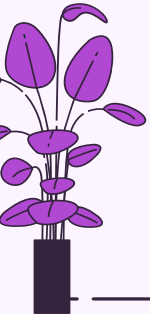
**—Chairman of the Stanford EE department**

# 01 Academic Programs

BSc, MSc, PhD, and Post-Doc  
programs

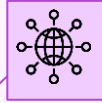


# Fields and faculty members



## Communications

17 faculty members

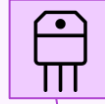


## Power

14 faculty members

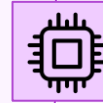
## Electronics

10 faculty members



**EE**  
**department**

71 faculty members



## Digital

13 faculty members



## Control

6 faculty members



## Microwave

9 faculty members



## Bio

8 faculty members

# Electrical Power Systems



A. Abbaspoor



M. Vakilian



H. Hosseini



Z. Nasiri



S. Kaboli



M. Parniani



A. Safdarian



H. Mokhtari



IEEE



M. Fotuhi



H. Oraei



E. Hajipour



F. Tahami



M. Zolghadri



# Electronics



M. Atarodi



M. Fakharzadeh



M. Fardmanesh



R. Sarvari



Z. Kavehvash



B. Rashidian



F. Akbar



A. Fotowat



A. Medi



M. Sharifkhani





# Bioelectrics



M. Fardmanesh



M. Shamsollahi



E. Fatemizadeh



S. Hajipour



H. Mohammadzadeh



A. Ghazizadeh



M. Jahed



B. Vosooghi



# Digital Systems



S. Bagheri



M. Babaeizadeh



M. Pakravan



H. Mohammadzadeh



A. Farhadi



K. Hajsadeghi



M. Hashemi



M. Jahed



M. Namvar



S. Saleh



M. Shabani



H. Shahmansoori



M. Sharifkhani



# Control & Dynamic Systems



A. Rezaeizadeh



M. Haeri



M. Tavazoei



M. Babazadeh



A. Nobakhti



N. Sadati



# Microwave & Photonics



M. Ahmadi



M. Akbari



A. Banaei



B. Rejaei



A. Khavasi



A. Shishegar



F. Farzaneh



M. Memarian



K. Mehrany



# Communication Networks & Systems



M. Aref



M. Bastani



F. Behnia



M. Naebi



A. Amini



F. Ashtiani



M. Babaeizadeh



M. Mirmohseni



M. Pakravan



H. Behroozi



M. Karbasi



B. Khalaj



M. Nasiri



J. Salehi



M. Yassaee



M. Hadi

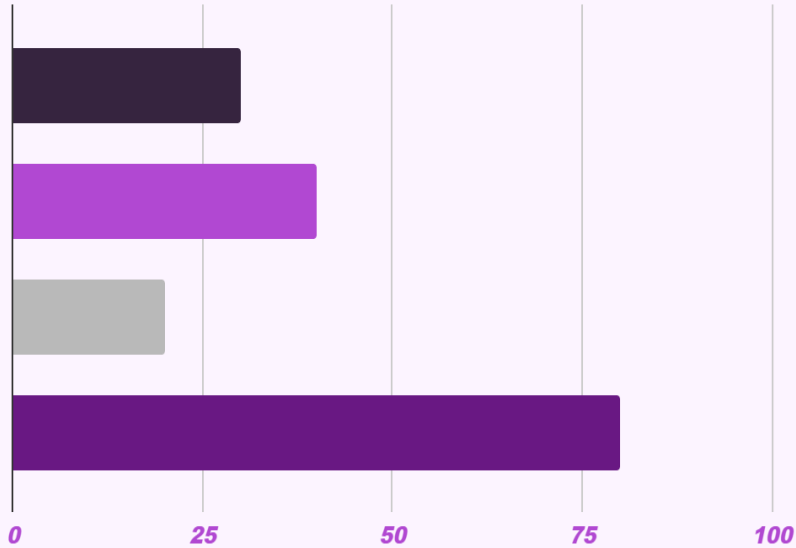




**Sharif EE Faculty Members**



# Academic programs



**xx%**

**B.Sc.**

1000 students  
200 entry per year

**xx%**

**M.Sc.**

380 students  
150 entry per year

**xx%**

**Ph.D.**

240 students  
40 entry per year

**xx%**

**Post-Doc**

??? students  
??? entry per year



# Special students



## Entrance Exams

???% of the below-100  
ranks



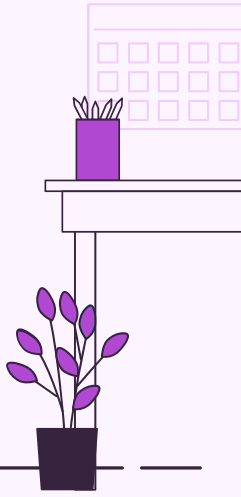
## Olympiads

X% of the olympiad  
medalists



## Credits

X% of the high-ranked  
students





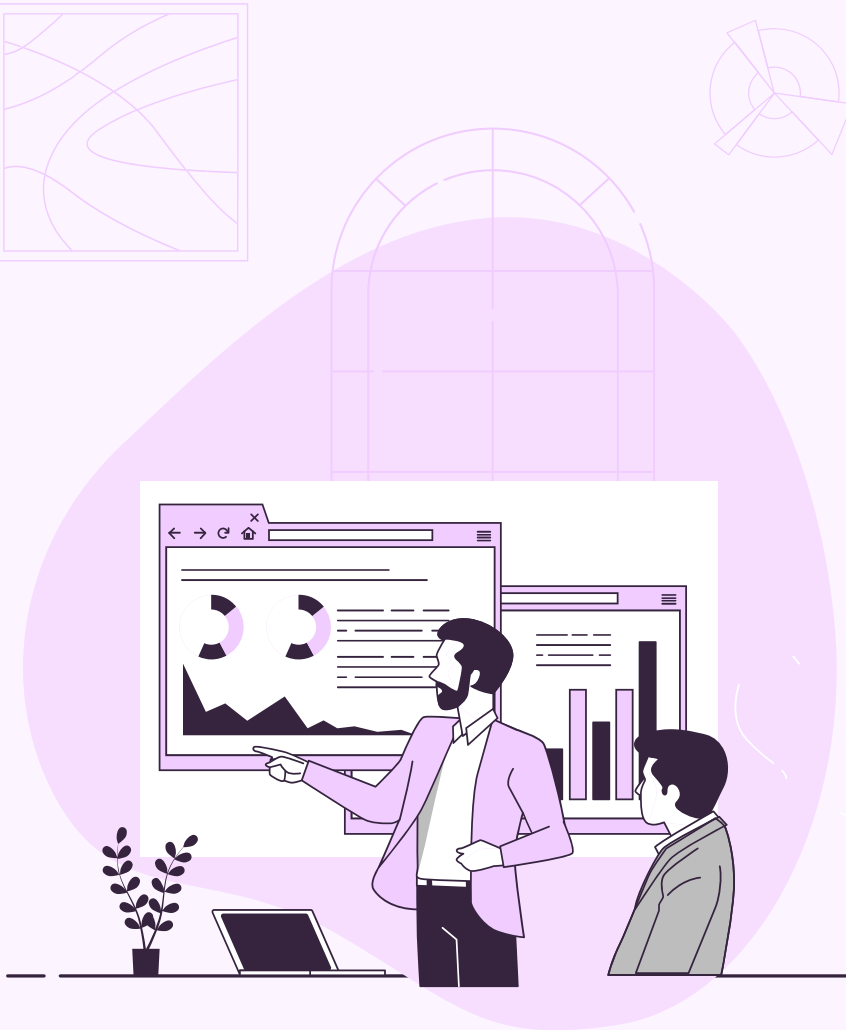


**Sharif EE Students**

# 02

## Research activities

Theoretic and practical research works



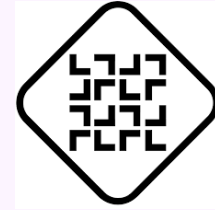
# Centers of excellence



**Communication  
access systems**



**Power system control  
and management**



**Cryptography and  
Encryption**



# Research institutes



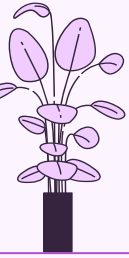
**Advanced  
communications**



**Converged  
technologies**



**Electronics**



# EE Sharif laboratories



**01**

Optics and Terahertz

**06**

Standard Testing

**02**

Numerical Electromagnetism

**07**

Blockchain

**03**

Power Electronics

**08**

Bio-medical Signal Processing

**04**

High-voltage Power Electronics

**09**

Advanced Control and Automation

**05**

Internet of Things and Cyber-physical systems

**10**

Digital Signal Processing



# EE Sharif laboratories



**11**

Optical Networks

**16**

Power System Reliability

**12**

National Projects

**17**

Wireless Communications

**13**

Super-conductivity

**18**

Augmented Intelligence

**14**

Network Decision

**19**

Infrared and Terahertz

**15**

Quantum Communication and Information

**20**

Integrated Circuits Test



# EE Sharif laboratories



**21**

Information Theory and Secure Communications

**26**

Machine Vision

**22**

Brain-Computer Interfaces

**27**

Hybrid Embedded Systems

**23**

Radar and Electronic Warfare

**28**

Intelligent Digital Systems

**24**

Lidar and Wearable Electronics

**29**

Advanced Radio Systems

**25**

Robotics

**30**

Advanced Control and Optimization



# EE Sharif laboratories



**31**

Analytical Control Systems

**36**

Software-Defined Communication Networks

**32**

Distributed Control Systems

**37**

Optical Communication Networks

**33**

Intelligent Systems

**38**

Semi-conductor Devices Simulation

**34**

Wireless Communication Networks

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Advanced FPGA Design

**35**

Smart Grids

**40**

Integrated system Design





# EE Sharif laboratories



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Isolation

**46**

Microwave and Photonics

**42**

Neuro-science and Engineering

**47**

Electrical Actuators

**43**

Multi-variable Industrial Control

**48**

Data Networks

**44**

Power Systems Control

**49**

Vehicular Communications

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Power Quality and microgrids

**50**

Artificial Creatures



# EE Sharif laboratories



**51**

Printed Circuits

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Semi-conductors

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Photonic Integrated Circuits

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Deep Learning

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Multi-media and Signal Processing

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*03*

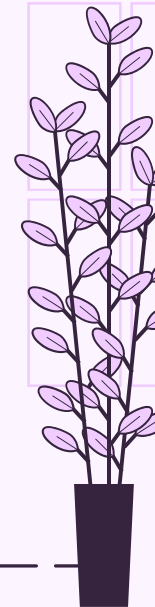
# Industrial collaborations

Knowledge-based products and  
companies



# 04 Cultural affairs

Scientific associations and guild  
councils





# ReACT



## ReACT

### Resana's Annual Conference on Technology

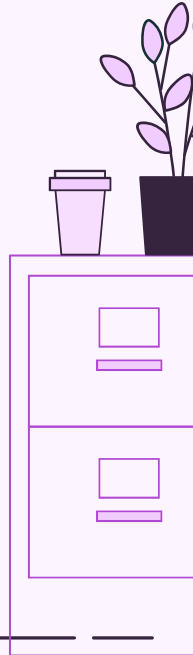
ReACT is an annual scientific conference on technology held by the students of Electrical Engineering department at Sharif University of Technology to share updates around the fields of electrical engineering, computer engineering and computer science

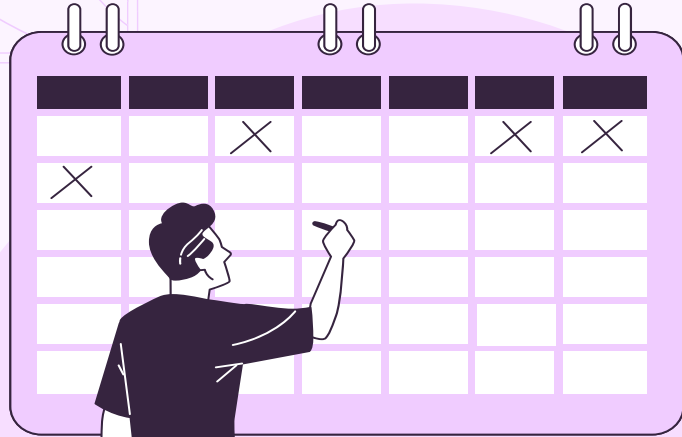
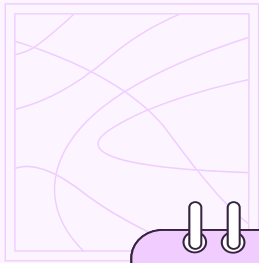


# Jaryan

## Resana's Monthly Talks on Electrical Engineering

Jaryan is a monthly scientific talk on electrical engineering held by the students of Sharif EE department.





# EE Sharif Roadmap

Short-term and long-term plans



# EE in furture



Artificial  
intelligence



Augmented  
reality



Blockchain



Drones

The Essential  
Eight



Internet  
of things



Robotics



Virtual  
reality

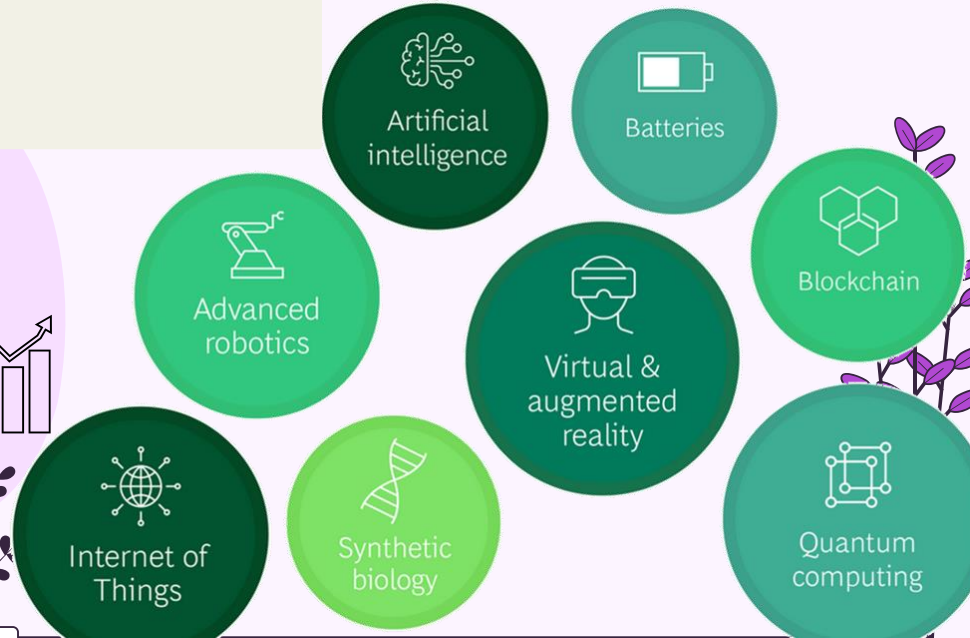


3-D  
printing





# EE in furture





# Thanks!

Do you have any questions?

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