



# علم داده ۲

وبینار آشنایی با کاربردهای ماشین لرینگ در همه رشته‌ها

# DATA SCIENCE 2

ML APPLICATION WEBINAR

Reza Shokrzad



# ML Applications

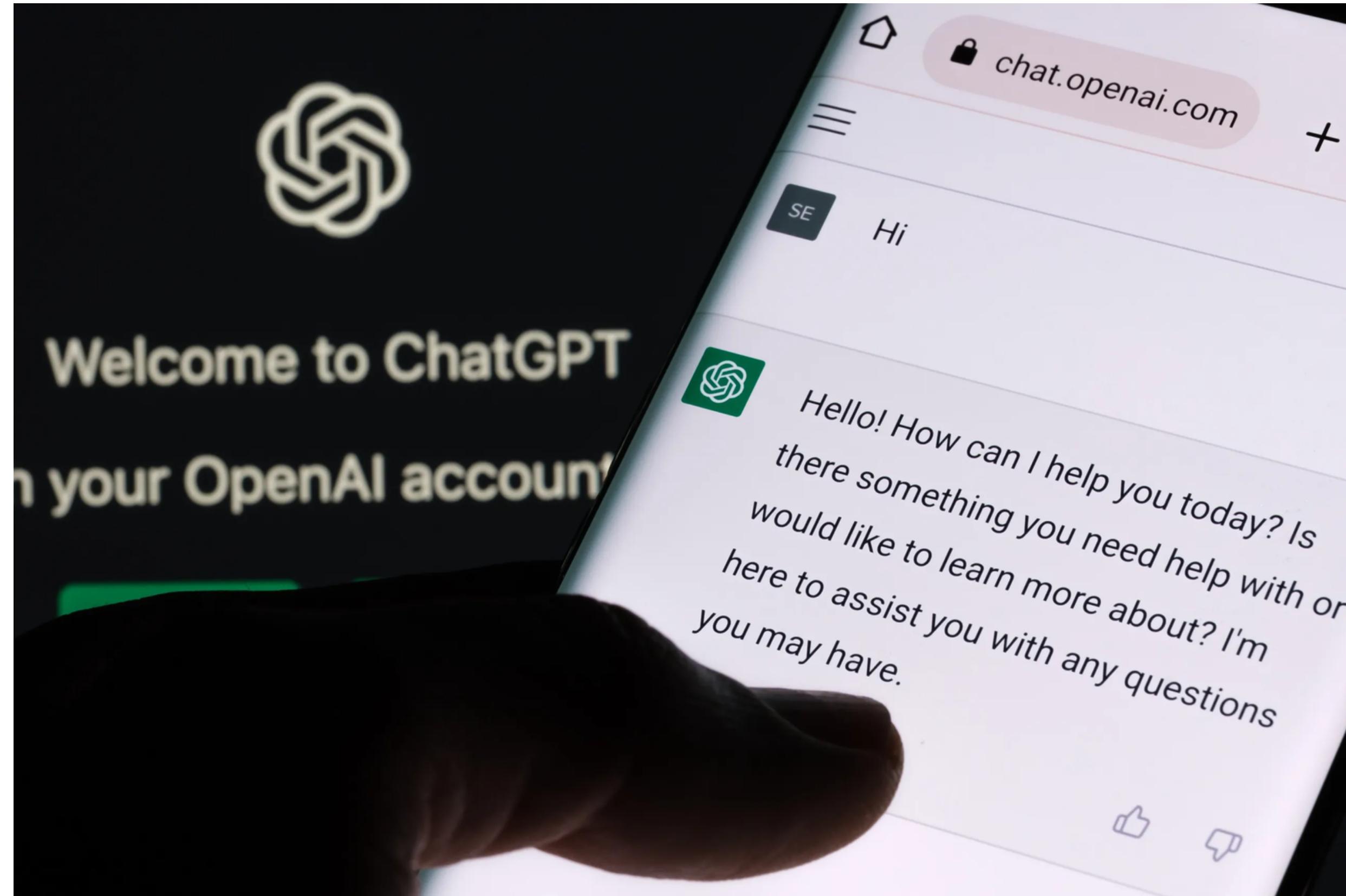
# ML in Real World



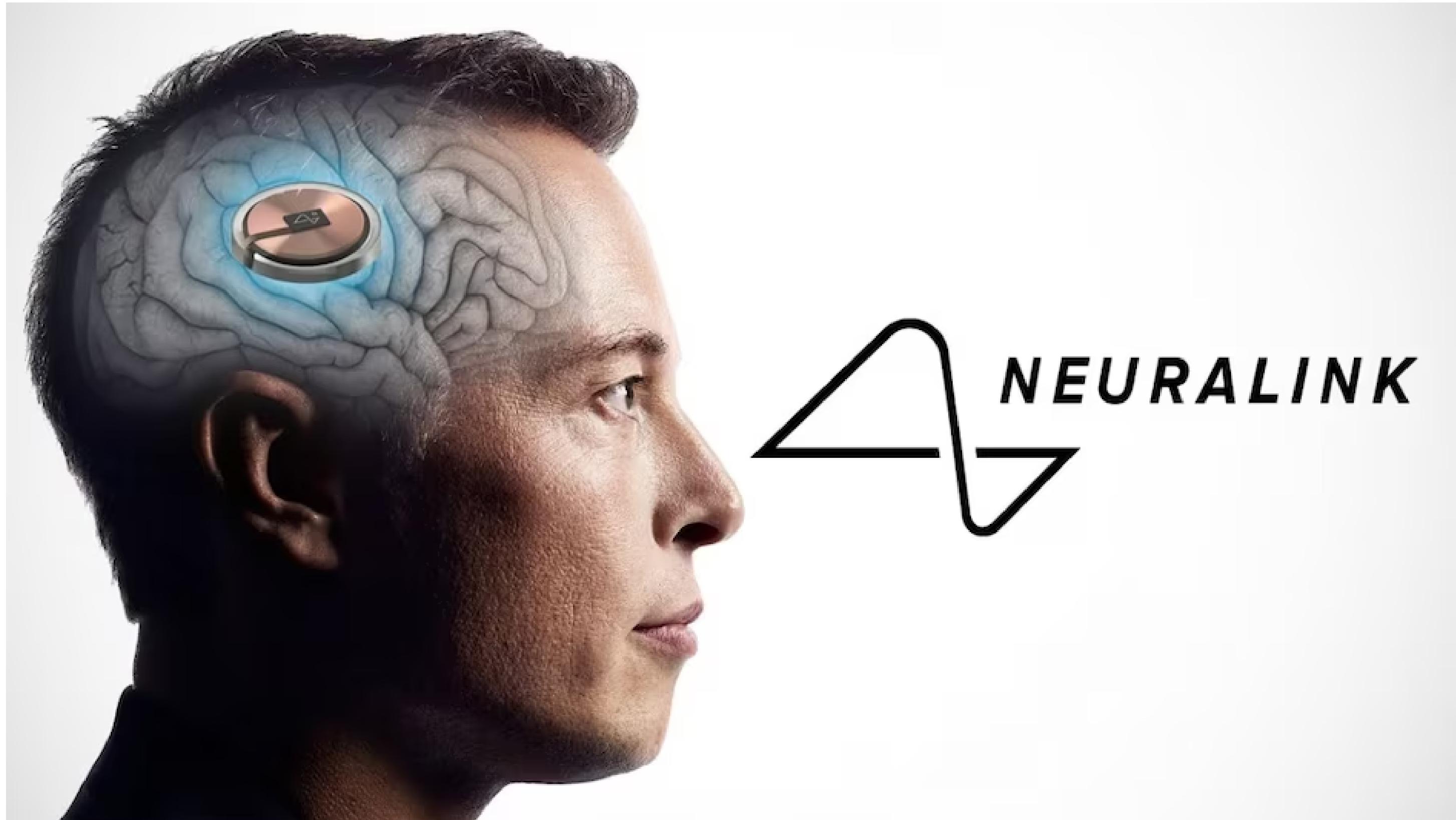
# ML in Real World



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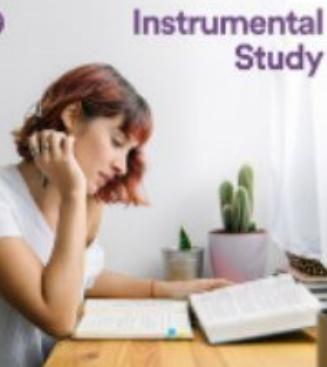
**Playlists de Spotify**



**Peaceful Piano**  
Peaceful piano to help you slow down,...



**Deep Focus**  
Keep calm and focus with ambient and pos...



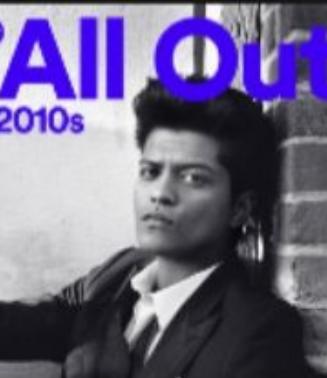
**Instrumental Study**  
Focus with soft study music in the...



**Today's Top Hits**  
Lil Durk & J. Cole are on top of the Hottest...



**RapCaviar**  
Music from Metro Boomin, Moneybagg...

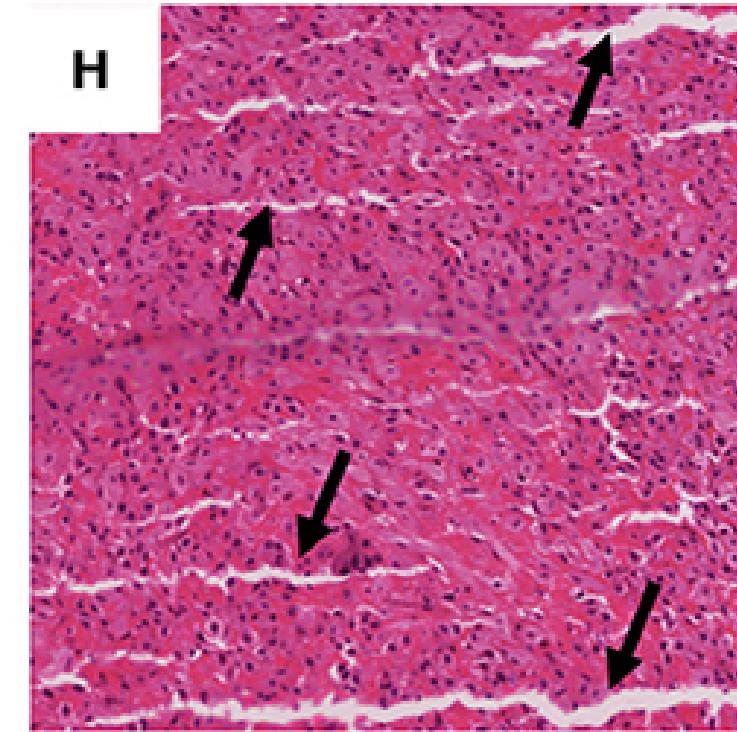
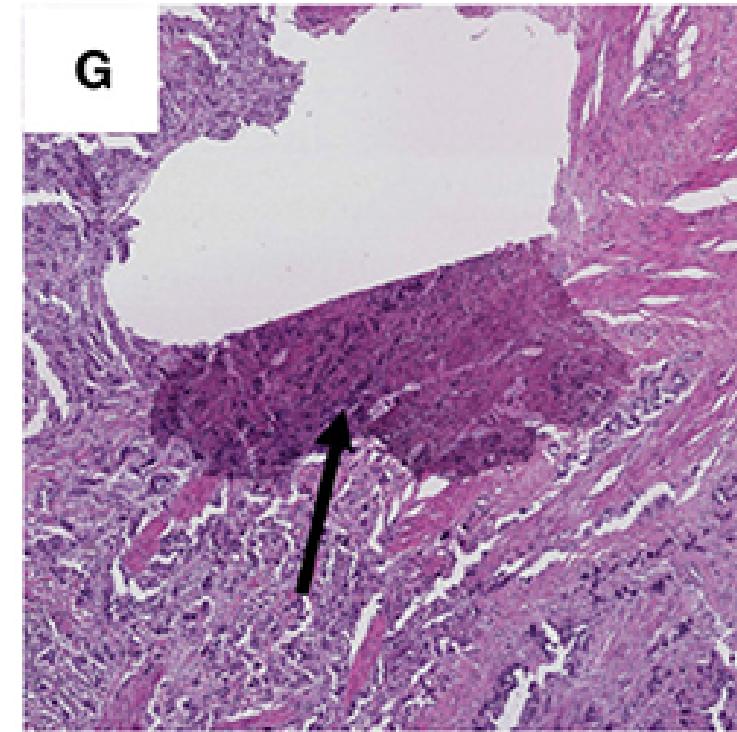
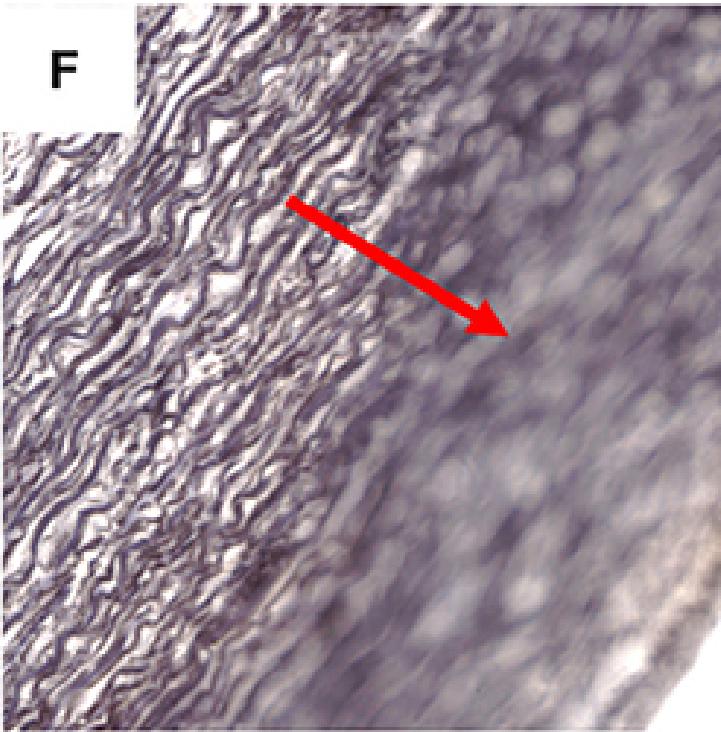
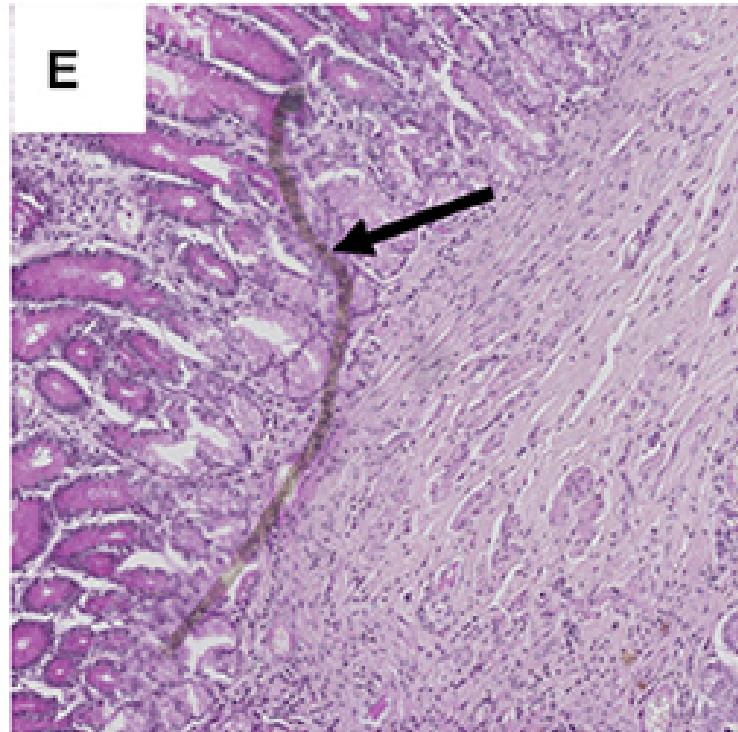
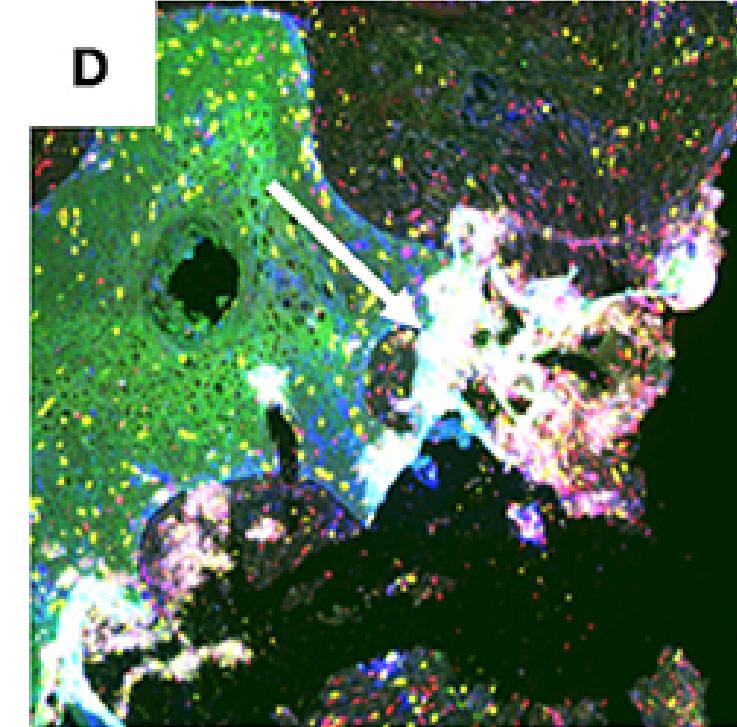
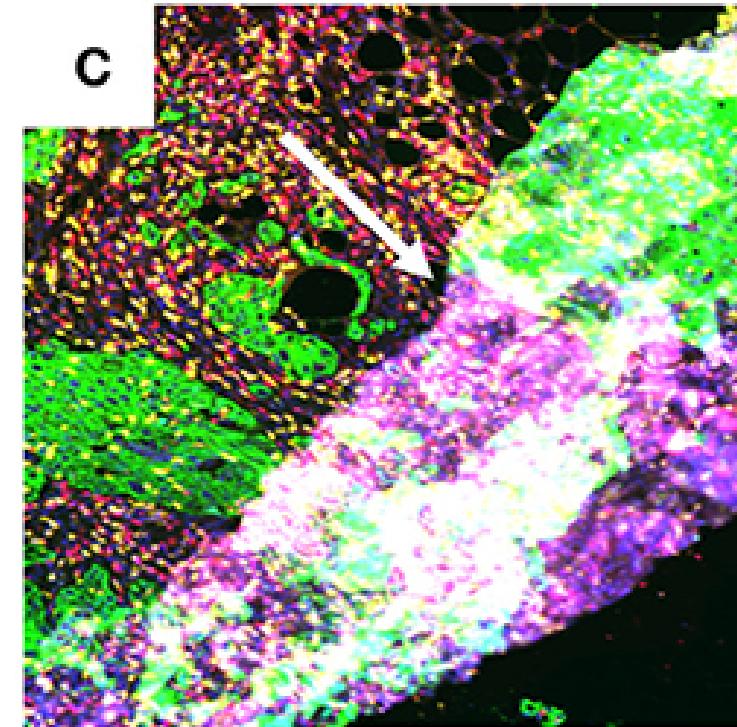
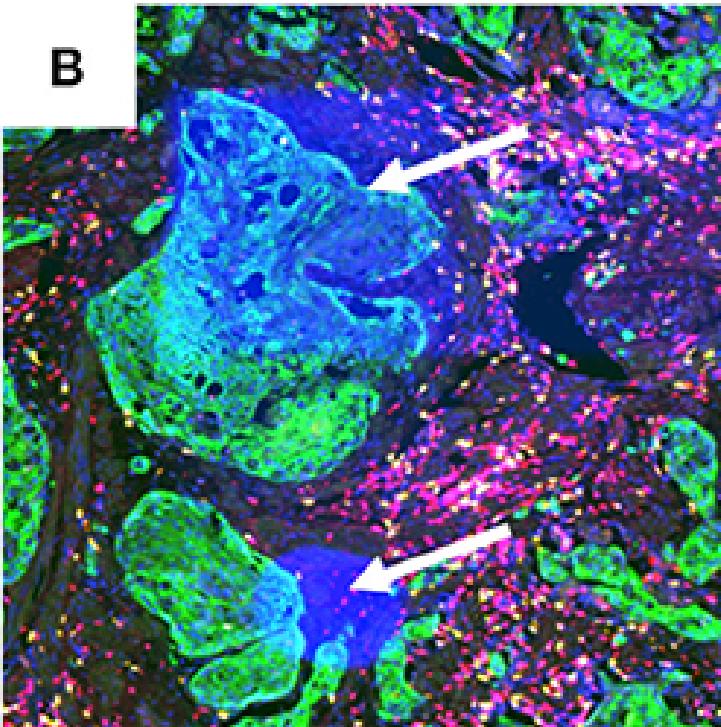
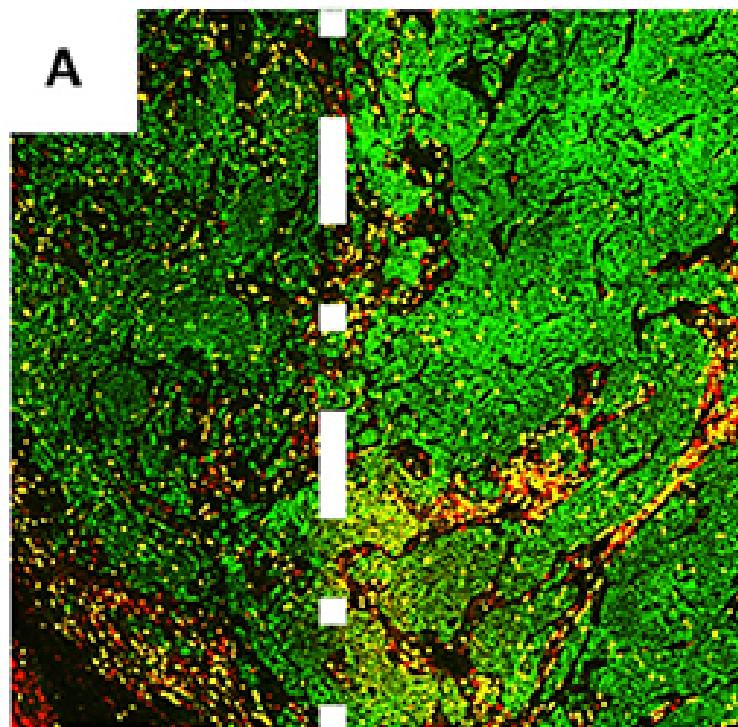


**All Out 2010s**  
The biggest songs of the 2010s.

# ML in Real World



# ML in Real World



# ML in Electrical Engineering (EE)

Academia	Industry
Neuromorphic Engineering	Predictive Maintenance
Signal Processing using Deep Learning	Energy Consumption Forecasting
Transfer Learning for Electrical Systems	Smart Grid Management
Quantum Computing and ML	Anomaly Detection in Electrical Systems
Federated Learning for IoT Devices	Optimized Resource Allocation in Wireless Networks

# ML in Mechanical Engineering

<b>Academia</b>	<b>Industry</b>
<b>Material Science and Metallurgy</b>	<b>Predictive Maintenance for Mechanical Systems</b>
<b>Bio-mechanical Modeling</b>	<b>Optimization of Manufacturing Processes</b>
<b>Fluid Dynamics and Aerodynamics</b>	<b>Robotics and Automation</b>
<b>Vibration and Acoustic Analysis</b>	<b>Supply Chain Optimization</b>
<b>Thermo-mechanical Simulations</b>	<b>Quality Control and Inspection</b>

# ML in Civil Engineering

<b>Academia:</b>	<b>Industry</b>
Geotechnical Analysis	Structural Health Monitoring
Climate Modeling for Infrastructure	Construction Site Safety
Urban Planning and Smart Cities	Traffic Flow Optimization
Seismic Analysis and Earthquake Prediction	Water Resource Management
Sustainable Construction Materials	Waste Management and Recycling

# ML in Industrial Engineering

<b>Academia:</b>	<b>Industry</b>
System Simulation and Modeling with ML	Supply Chain Optimization
Cognitive Ergonomics	Production Scheduling
Economic Decision Analysis with ML	Quality Assurance and Control
Stochastic Optimization	Facility Layout and Design
Sustainability and Green Manufacturing	Human Resource Allocation



# What is ML

# What is ML?

