

Computer Vision & Image Processing

- 000 Image Generation & Segmentation
- 001 Face & Fingerprint Recognition
- 002 Multimodal Vision & Transformer 003 Object Detection & Classification
- 004 Mapping & Geospatial Analysis

### Natural Language Processing

- 010 Text to Text Transformer
- 011 Knowledge Graphs & Reasoning

## Speech Recognition & Audio Processing

- 020 Music & Acoustic Modeling
- 021 Emotion & Cognition in Audio
- 022 Speech Recognition

### Biomarkers for Health & Performance

- 030 Clinical Decision Support
- 031 Human Computer Interaction
- Machine Learning Foundations
- 040 Supervised Learning 041 Neural Network Architectures
- SVM & Decision Tree 042
- 043 Probabilistic Modeling & Optimization
- 044 Unsupervised Learning
- 045 Unsupervised Learning

Medical Imaging & Radiology

- 100 Musculoskeletal Imaging
- 101 Neuroimaging & Imaging Physics
- 102 Cancer Detection & Screening
- 103 Disease Diagnostics

### Neuroscience & Mental Health

- 110 Neuroscience
- 111 Knowledge Graphs & Reasoning

### Clinical Informatics & Public Health

- 120 Cardiovascular Risk Modeling
- 121 Treatment Response & Risk Prediction
- Epidemiological Forecasting & Policy
- 123 Human-Centered Medical AI Systems
- 124 Clinical Decision Support

- Molecular Biology & Drug Discovery
- 130 Molecular Biology
- 131 Drug Discovery

## Microbial and Immune Systems Biology

- 140 Infectious Disease & Immunology
- 141 Microbial Ecosystems

## Genetics & Genomics

- 040 Cancer Genomics
- 041 Gene Regulation
- 042 Mutation & Evolutionary Genetics
- 043 Organ Physiolog

- Education & Learning Science
- 200 Learning & Performance Analytics
  - Teaching & Curriculum Design
- 202 Learning Psychology & Motivation

## Digital Media & Communication

- 210 Content Integrity & Safety
- Social Media & Public Discourse
- 213 Dialogue & Conversational AI

### Politics & Governance

- 222 Game Theory & Decision Making

## Finance & Stock Market

- Smart Manufacturing
- 243 Enterprise Digitization
- 245 Profiling & Personalization

### Urban Development

Ethical & Creative AI

- 250 Sustainable Development
- 260 Artificial Cognition & Ethics

- Sentiment Mining & Analysis

- 220 International Politics & Law
- Science Policy & Knowledge Networks

- 230 Algorithmic Trading
- Digital Financial Services
- 232 Macroeconomic Financial Policy

## Business & Management

- 240 Risk Analytics & Decision Modeling
- Organizational Performance
- Digital Marketing 244

- 251 Tourism
- 261 Digital Art 262 Virtual Reality

# Natural Sciences

- Climate & Hydrology
- 300 Tectonics & Geology
- 301 Topography & Earth-Observation
- 302 Hydrology & Marine Science
- 303 Ecosystem Ecology 304 Climate & Atmospheric Prediction

# Material Science

- 310 Flow, Wind & Heat Modeling 311 Material Strength & Fabrication
- 312 Polymers, Photonics & Biomaterials

# Energy & Thermodynamics

- 320 Petroleum Mapping & Extraction 321 Environmental Engineering

# Agriculture & Forestry

- 330 Forest Ecosystems
- 331 Soil & Microbiome Monitoring
- 332 Crop Disease & Species Classifier
- 333 Livestock & Veterinary Science 334 Agriculture & Yield Optimization

# Astrophysics & Quantumphysics

- 340 Astrophysics 341 Computational Quantum Systems
- 342 Particle & Nuclear Physics

## Neuromorphic Hardware Accelerators

### 350 Neuromorphic Computing 351 Circuit Architecture for Neural Systems

# Construction & City Planning

360 Construction Technology 361 Mobility & City Planning

# Engineering & Applied Sciences

- Cybersecurity & Privacy
- 400 Cybersecurity 401 Blockchain & Cryptography

## 402 Hardware - Software Interaction

- IoT & Edge Computing
- 410 Wireless Communications
- 411 Edge Computing 412 Cloud & Distributed Systems

# 413 IoT Devices & Sensors

- Anomaly & Fault Detection
- 420 Structural Health Monitoring
- 421 Anomaly Detection 422 Fault Detection

- Energy Technologies
- 430 NEV & Battery Health 431 Power Asset Monitoring
- 432 Smart Grid Analytics & Optimization
- 433 Energy System Modeling 434 Renewables & Grid Optimization
  - Autonomous Mobility
- 440 Autonomous Driving
- 441 Traffic Modeling 442 Networked Routing

# Robotics & Mechatronics

- 450 Navigation & Path Planning
- 451 Embodied Robotics 452 Task Scheduling & Decision Making
- 453 Control Systems & Fuzzy Logic