

AI @ ECE FLORIDA



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The ECE Department is very proud of alumnus Chris Malachowsky (BSEE '80) who spearheaded the AI Initiative at UF. ECE has been researching and teaching AI for decades but the AI Initiative is pushing us forward at an even faster rate.

Curriculum: We are integrating AI into our ECE curriculum in a number of ways. For undergraduate EEs, we added a required course in Data Science using Python (EEL3850 Data Science for ECE) and added a breadth option: (EEE 4773 Fundamentals of Machine Learning). At the graduate level, we regularly teach many AI-related courses. The 5000-level AI graduate courses are also offered with undergraduate sections.

Research: Funded research projects are too numerous to list but include foundational development of AI theory, algorithms, and architectures as well as application of AI to areas such as agriculture, cybersecurity, internet of things, transportation, health/medical, neuroscience, networking, and image/signal processing.

CORE AI GRADUATE COURSES

EEL 5840 Fundamentals of Machine Learning
EEL 5406 Computational Photography
EEE 5283 Neural Signals, Systems and Technology
EEE 6504 Machine Learning for Time Series
EEE 6512 Image Processing and Computer Vision

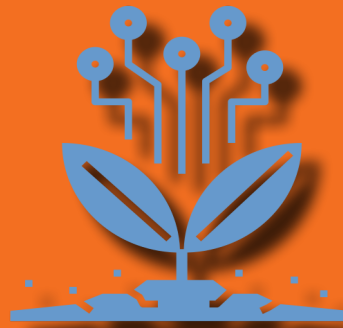
EEE 6561 Fundamentals of Biometric Identification
EEL 6814 Neural Networks and Deep Learning
EEL 6825 Pattern Recog.and Intelligent Systems
EEL 6935 Advanced Robot Perception
EEL 6935 Neuro-AI: Neuroscience Meets AI

FUNDED ECE FLORIDA AI CENTERS



Machine Learning

The NSF Center for Big Learning (CBL) leverages an industry consortium to pioneer new theory and applications using novel algorithms and architectures.



Precision Agriculture

The NSF Center for the Internet of Things for Precision Agriculture (IoT4Ag) will develop new technologies and AI systems to produce more food with less water and energy.

24

Faculty members actively involved in AI research

70

Active currently funded AI projects (as of 4/9/21)

\$30M

Total current AI research funding