The Generative Intelligence Lab @ FAU

http://generativeintelligencelab.ai

TUTORIAL
Generative Intelligence and Business

Description

This **short tutorial (1–2 hours)** demonstrates how Generative Intelligence Systems operate to reshape business processes, open new business opportunities, and augment or create innovative applications. It is designed for a **business audience with a non-technical background**, and promotes an understanding of Generative AI as a strategic enabler for founders, entrepreneurs and business leaders.

- What is Generative Intelligence, and how does it differ from traditional AI used in business?
- How can startups and entrepreneurs use GenAI to ideate, prototype, and launch new products or services?
- How can non-technical founders leverage GenAI to build interactive tools like chatbots, customer assistants, or internal helpers that make sense in business contexts?

Objective:

- Provide a non-technical audience with a foundational understanding of Generative Intelligence, its capabilities, and relevance in scientific research.
- Demonstrate how Generative Intelligence can redefine the collaborative creative process, with a focus on automating parts of the research workflow while also being extensible to other domains of creative and strategic thinking.

Target audience:

- This tutorial is intended for faculty, business leaders, and students from **non-technical backgrounds** who are interested in exploring the role of Generative Intelligence in business. No prior experience with AI or programming is required.

Topics

Understanding Generative Intelligence

- What Generative AI is and why it matters in research
- Basic concepts behind large generative models
- What are generative Intelligence Systems
- How these models understand and generate language
- How to interact with them through simple inputs and task

How to Think About GenAI in Business Applications

- What Generative AI *can* and *cannot* do in business settings
- Creating interactive interfaces such as research chatbots or assistants
- Using GenAI to ‘talk to documents;
- Supporting idea generation, summarization, exploration, and rapid prototyping
- Integrating GenAI into business workflows

How to Interact with Generative Intelligence

- Basic view of Prompt Engineering
- Learn how to write clear and simple instructions to get useful, relevant results
- Explore easy techniques to improve your questions or tasks for better outcomes
- Common mistakes people make when using GenAI and how to avoid them

How Agentic AI works

- Why the ‘hype’ around Agentic AI
- Introduction to agentic AI systems and how they differ from simple tools
- Examples of AI agents that support research planning, analysis, or engagement
- How AI assistants can learn goals, manage tasks, and adapt

Collective Intelligence

- Understanding the power of collaborative interfaces
- Communication, coordination, and creativity in human–AI teams
- Use cases for co-creative AI in business innovation

About the Instructor

Dr. Fernando Koch is a Research Professor at Florida Atlantic University, where he leads the Generative Intelligence Lab. He is a global leader in Artificial Intelligence and Generative AI with over 30 years of experience spanning academic research, enterprise innovation, and solution architecture. Dr. Koch holds a Ph.D. in Computer Science from Utrecht University and has held leadership roles at IBM Research, Samsung Research, and Openwave, as well as academic appointments at the University of Melbourne and Korea University. His work bridges academia and industry, with a proven track record of driving and scaling AI initiatives across Fortune 100 companies, startups, and research institutions. Dr. Koch is a technical advisor to entrepreneurs and innovation leaders, known for building high-performing development teams and delivering AI solutions in complex enterprise environments. He has co-edited 6 books, authored over 90 scientific publications, and filed more than 100 patent applications (http://www.fernandokoch.me)