



TRANSFORM YOUR ORGANIZATION WITH ARTIFICIAL INTELLIGENCE

AUGMENT CAPABILITIES • DIGITIZE PROCEDURES • GAIN FRESH INSIGHTS

The Health Data Analytics Initiative creates collaborations with world-class AI experts. We build powerful teams consisting of faculty, students, researchers and practitioners to harness the power of AI to advance healthcare delivery and medical research. We transform healthcare delivery workflows and improve human decision making. In a one day AI discovery and orientation workshop we discuss your challenges, brainstorm approaches, identify project goals and evaluate the potential for a successful collaboration. Contact us!



JOIN US FOR A **FREE** AI DISCOVERY WORKSHOP!

This workshop covers:

- Introduction to unique aspects of AI
- Building a data inventory
- Analyzing your data on a high level
- Identifying possible AI application areas based on your business needs
- Discussing collaboration with the Health Data Analytics Initiative

Turn page for full project approach!

I COLLABORATE WITH THE UNIVERSITY OF ILLINOIS

The Health Data Analytics Initiative at Illinois boasts a group of leading experts in AI and data science using cutting-edge technology to enable your company to respond with precision to a variety of challenges. Our collaborative mindset encourages partnerships with some of the best data scientists in the world, influencing nearly every aspect of modern medicine. We apply AI to medical research in a variety of ways, producing literally life-changing outcomes.

Our experience in clinical settings ranges from complex data-retrieval solutions to digitizing error-prone procedures, from developing re-admission models to predicting drug responses, and much more. As part of the University of Illinois, it's our mission and responsibility to support both start-ups and established industries by providing resources and services to advance research and economic development both locally and nationwide.



Grainger College of Engineering
UNIVERSITY OF ILLINOIS URBANA-CHAMPAIGN

HEALTH DATA ANALYTICS INITIATIVE | HEALTH CARE ENGINEERING SYSTEMS CENTER

George Heintz, Program Manager | jheintz@illinois.edu | 217-300-1924 | 1206 W. Clark Street, Urbana IL, 61801

PROJECT APPROACH

1

Project Development I: AI Discovery Workshop

- Interviews
- Assess data sources such as servers, databases, storage, IoT devices, papers, & unstructured text

2

Project Development II: Target Setting

- Discovery visualization
- Descriptive statistics, patterns
- Brainstorming
- Output: research question & goal

3

Business Alignment

- Stakeholder buy-in
- Business case

4

AI Development

- Data collection & data wrangling
- Classical descriptive statistics
- Analysis of linear-nonlinear systems
- Pattern recognition
- Natural language processing
- Classical predictive analytics
- Machine learning
- Reinforcement learning
- Deep learning

5

Validation

6

Implementation

- Software development
- Handover

7

Operation

- Service & delivery
- Change management

8

Benefit Realization



Data types: Clinical, pharmaceutical, laboratory, genomic, social, environmental, health status records, treatment process info, and historical & visiting experience



Data Science: Curation, Mining, Visualization, Text Transformation, and more

Machine Learning: Neural Networks, Random Forest, Decision Trees, Logistic Regression, and more



CUSTOMIZED AI

Get in touch! Send us an email and we will contact you to discuss workshop details and answer any questions you may have.

