Major Topics of this Course

- From tokens to intelligent email agents
- Applications
- Python
- More

Methodologies, Tools, and Languages
- Other intro to class interests
- Machine learning
- Natural language processing
- Advanced topics

Objectives

Introduction

Artificial Intelligence Application

Development

Course Overview

Today's Outline
Reference documents give precise explanations.

Tools provide Electrical introductions

- Visualization
- Classifying
- Parsing
- Tagging

Probabilistic modeling

Processing techniques (encoding, parsing, ...)

data types (tokens, features, ...)

Many tasks common to NLP and AI

Python modules define standard interfaces and simple implementations for

**NLP Contents**

- object-oriented
- Support for good programming style
  - executable pseudocode
  - self-documenting code
  - interpreted, with no compilation step
- Support for rapid prototyping
- designed to be easily learned
- Shallow learning curve

**Python**

The field of Artificial Intelligence (AI) is primarily concerned with under-

Artificial Intelligence
Office Hours TBA

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Contact Information

Member Circles
Faculty Intelligence Syllabus Program
Research Scientist, LDCC
Associate Professor, Computer Science Department

Affiliations

Dr. Diane LBen

Administration

Games

Babelfish (babelfish.altavista.com)
Machine Translation

Ask Jeeves (www.ask.com)
AnswerBus (www.access.com/answerbus)

Question Answering

ELIZA (www-ai.is/elsa/eliza.html)
Dialogue Systems

Demos

Sample Pit Applications

Who should be here
Requirements
Web Page
Textbook
Professor

Detect Disease Outbreaks
Recognize opinions in the world press
Access the web over the telephone
Teach students in areas such as physics
Office Hours

http://www.cs.pitt.edu/~ilirman

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Contact Information

Doctoral Student, Computer Science Department

Ali Alnajawi

Who are you?

Class

• Teaching Assistant

Homepage

http://www.cs.pitt.edu/~ilirman

Research

- Plan recognition
- Knowledge representation
- User modeling and personalization
- Machine learning applications
- Other artificial intelligence
- Speech and Natural language processing

Background

• 1998: Ph.D., Computer Science, University of Rochester (funded by AT&T)
• 1994-1998: Assistant Professor, Computer Science, Columbia University (funded by AT&T)
• 1992-1994: Tech intern, AT&T Bell Laboratories
• 1990-1992: Tech intern, AT&T Research Department
• 2001-present: University of Pittsburgh
Pre-requisites

- Python 2.7 and above
- Basic knowledge of Python not assumed
- Background in computer science
- Ability to write and use programs
- An interest in Artificial Intelligence, and ...

Requirements

- Class Participation
- Email Programming Project (Programming, Paper, and Presentation)
- Homeworks (Problem sets, writing and using programs)
- Readings (before class)

Syllabus

- WWW.cs.rit.edu/~lurban/courses/CS1573/173��ml
- URL
- Selections from other textbooks
- Learning Python (Help for Programmers) by Mark Lutz and David Ascher