

The background is a complex digital illustration. It features a dark blue and black color palette with glowing light blue and yellow accents. The design is filled with intricate circuit board patterns, various computer components like a monitor and keyboard, and abstract data visualizations. The words 'AI' and 'NETWORKS' are scattered throughout in a light, semi-transparent font. A stylized brain is depicted on the right side, suggesting the intersection of human and artificial intelligence. The overall aesthetic is futuristic and technological.

AI Workshop @ NTNE

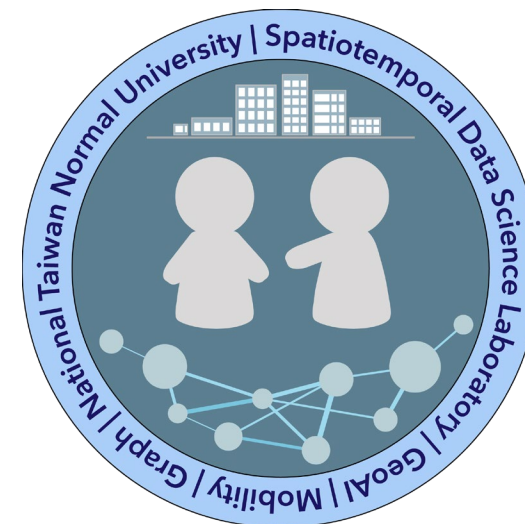
Chun-Hsiang Chan

Department of Geography, National Taiwan Normal University

2024.09.12

Outline

- About CCH
- Foundations of Artificial Intelligence
- Machine Learning Algorithm (Part I)
- Machine Learning Algorithm (Part II) + Explainable AI
- Further Learning Materials



About CCH

現職:

國立臺灣師範大學地理系 助理教授

主要經歷:

中原大學智慧運算與大數據學士班/碩士學位學程 助理教授

台灣資安鑄造股份有限公司 人工智慧分析顧問

臺北醫學大學醫學系放射線學科 博士後研究員

臺北市立萬芳醫院影像醫學部 博士後研究員

中央研究院社會學研究所 兼任資料分析師

資訊工業策進會資安科技研究所 工程師

國家災害防救科技中心坡地組 實習生

國立臺灣大學化學系 專題生

學歷:

國立臺灣大學地理環境資源學系 博士

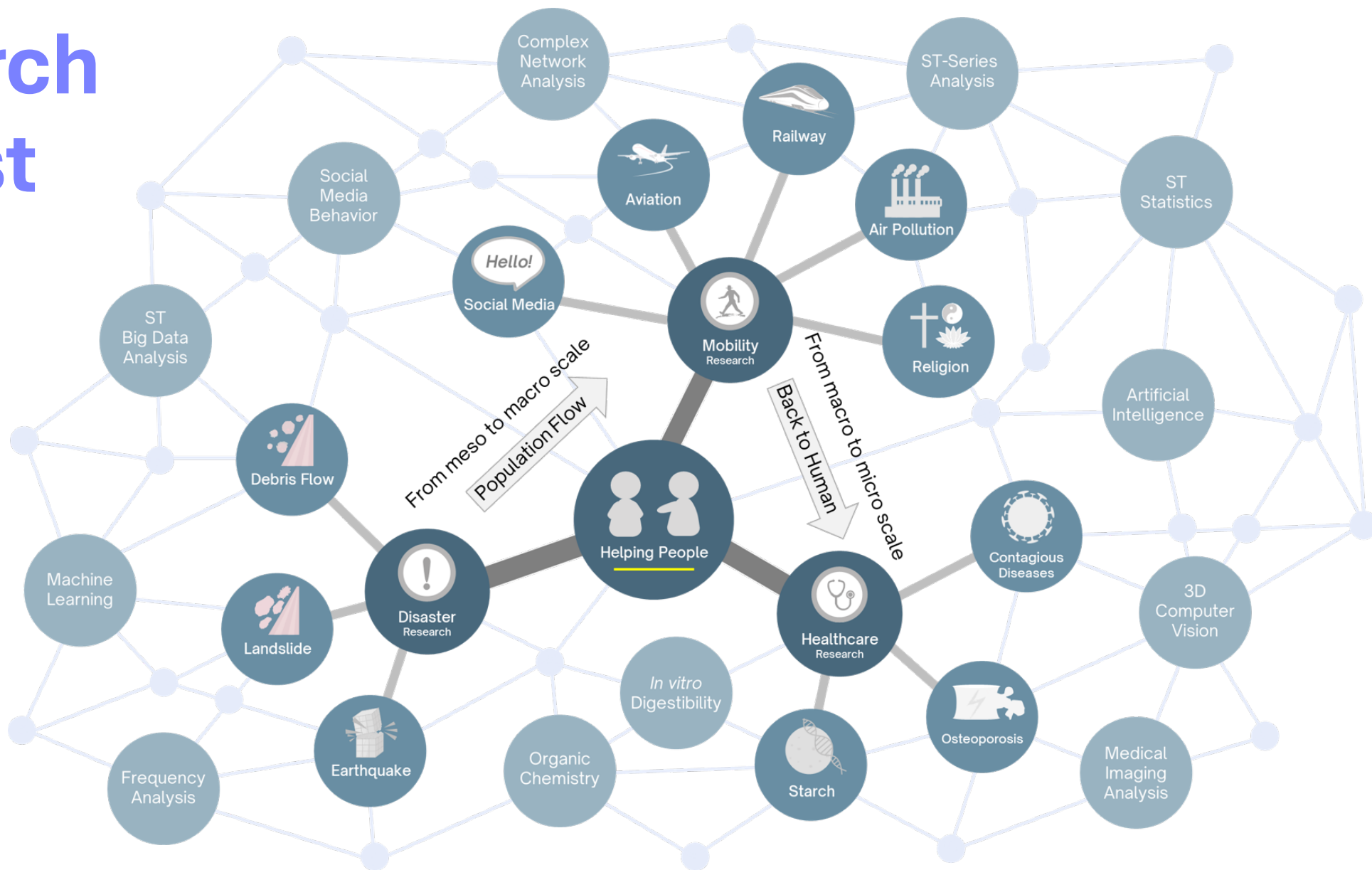
國立臺灣大學地理環境資源學系 碩士

實踐大學食品營養與保健生技學系 碩士

國立臺北教育大學社會與區域發展學系 學士



Research Interest



Previous Projects



Global Airline Alliance Airport Network



Timely Exposure Risk Estimation



COVID-19 Disease Transmission

Spatiotemporal Religious Dissemination



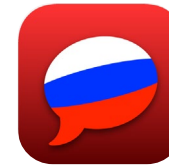
Social Media Marketing



Global

Urban

Other Interests



Русский | Español | 日本語



My first Russian Book |
Published in Nov. 2021



Exhibition Staff |
Moscow, 2015



Exhibition Staff | St. Petersburg, 2015



Exhibition Staff | República Dominicana, 2015



Exhibition Staff | Colombia, 2015



Host | NTU Russian Night, 2017



ABC news | Paraguay, 2015
Exhibition Staff | Paraguay, 2015

Foundations of Artificial Intelligence

09.19 | 人工智慧基礎(概念、資料處理、程式設計基礎)

- System and environment settings for developers
- What is artificial intelligence?
- How does artificial intelligence change our daily life?
- The opportunities and dilemmas of artificial intelligence
- Data processing and cleaning
- Labeling
- Basic Programming (Pandas & Numpy)

Machine Learning Algorithm (Part I)

10.17 | 機器學習資料前處理

- Objectives
- Data Collection
- Mindset in Data Preprocessing
- Data Preprocessing (Cleaning)
- Data Integration
- Summary

Machine Learning Algorithm (Part II) + Explainable AI

10.24 | 機器學習演算法

- Concept of Classification
- Evaluation Metrics
- Model Optimization
- Overfitting vs Underfitting
- Bagging
- Boosting
- K-Nearest Neighbors
- Decision Tree
- Random Forest
- AdaBoost
- Gradient Boost
- XGBoost
- LightGBM
- CatBoost
- Naive Bayes
- Linear SVM
- Remarks

Further Learning Materials



Urban Geographic Information System (Python)



Urban Geographic Information System (Python) @ NTNU Course Content

As the development of air transportation, people are suffered from infectious disease much severe than ever. But how can public health system from a geographic approach? In the undergraduate courses, you have already understood various spat however, you seldom apply these methods into your projects or dissertations. Here, we will use three examples: spatiotemporal disease transmission and the applications of spatial analysis in the clinical medicine.

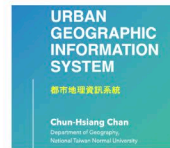
Course Intro.



Python Environment Settings



Python Basic I



<https://toodou.github.io/>

Sep. 12, 2024

Big Data Fundamentals and Application



Big Data Fundamentals and Application @ CYCU Course Content

The term "Big Data" has been popular in recent years, but the spirit and critical conc data warehouse or analytic R&D cost could not reflect on revenue to the company. I skills within this course and attempt to stimulate brainstorming through several p required to leverage the data analytical approaches in the final project presentation.

Course Intro



[Slide] Numerical Analysis I



Chun-Hsiang Chan (2024)

Web Crawler Practice



Web Crawler Practice @ NTNU Course Content

Many datasets are available on line and often consist of a vast amount of data. Downloading the entire dataset quickly can be a challenge. However, manually selecting data to download can result in missing important information. This course aims to teach you the most widely used web crawler package in Python for both static and dynamic websites, enabling you to efficiently download the desired datasets.

Course Intro.



01 :: Course Introduction

Contents: (1) About CCH (2) Course intro (3) Grading policy (4) Why do you need to take this course? (5) What will you learn from this

Web Crawler Ethics



02 :: Web Crawler Ethics

Contents: (1) The Definition of Web Crawler (2) Legal Issues (3) Regulations (4) Ethical Problems (5) LawsuitExamples (6) Questions

Web Design I :: HTML




03 :: Web Design I - HTML

Content: (1) What is HTML? (2) Editors: Sublime (3) How to Design My First Website? (4) Website Architecture (5) Lorem Ipsum (6)

Further Learning Materials





Coding the World

@codingtheworldcch · 833位訂閱者 · 60 部影片

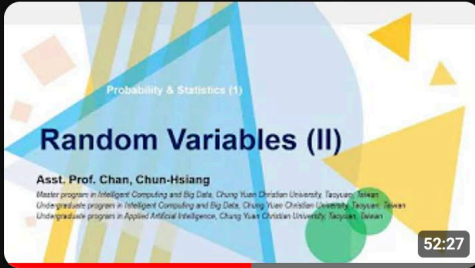
Hi everyone! 歡迎來到 "Coding the World"~~ ...顯示更多

toodou.github.io/index.html

自訂頻道 管理影片


首頁 影片 播放清單 貼文

為你推薦



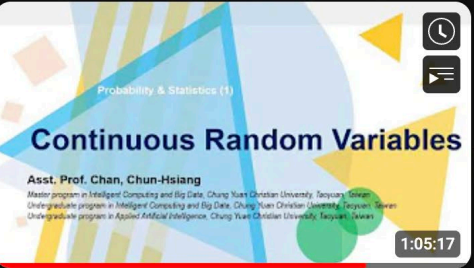
Probability & Statistics (I)
Random Variables (II)
Asst. Prof. Chan, Chun-Hsiang
Master program in Intelligent Computing and Big Data, Chung Yuan Christian University, Taoyuan, Taiwan
Undergraduate program in Intelligent Computing and Big Data, Chung Yuan Christian University, Taoyuan, Taiwan
Undergraduate program in Applied Artificial Intelligence, Chung Yuan Christian University, Taoyuan, Taiwan

52:27



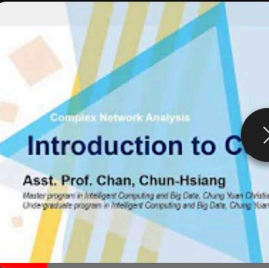
Web Crawler Practice
Web Architecture
Dr. Chun-Hsiang Chan
Department of Geography,
National Taiwan Normal University

40:29



Probability & Statistics (I)
Continuous Random Variables
Asst. Prof. Chan, Chun-Hsiang
Master program in Intelligent Computing and Big Data, Chung Yuan Christian University, Taoyuan, Taiwan
Undergraduate program in Intelligent Computing and Big Data, Chung Yuan Christian University, Taoyuan, Taiwan
Undergraduate program in Applied Artificial Intelligence, Chung Yuan Christian University, Taoyuan, Taiwan

1:05:17



Complex Network Analysis
Introduction to C
Asst. Prof. Chan, Chun-Hsiang
Master program in Intelligent Computing and Big Data, Chung Yuan Christian University, Taoyuan, Taiwan
Undergraduate program in Intelligent Computing and Big Data, Chung Yuan Christian University, Taoyuan, Taiwan

1:05:17

W12 機率與統計 Random Variable (Part II) #隨機變數 #Poisson #geometric #hypergeometric...
觀看次數：190次 · 1 年前


網頁爬蟲實務 Web Crawler | 網路架構 Web Architecture #osimodel #tcpip #udp #traceroute...
觀看次數：95次 · 4 個月前

W13 機率與統計 Continuous Random Variable #連續隨機變數 #uniform #normal #exponential
觀看次數：362次 · 1 年前

Introduction to Complex Network #complexnetwork #graphtheory
觀看次數：79次 · 1 年前


熱門影片

全部播放




C Programming
進階C語言應用 課程影片

29:12




C Programming
進階C語言應用 課程影片

32:28




C Programming
進階C語言應用 課程影片

37:36




C Programming
進階C語言應用 課程影片

11:47



C Programming
進階C語言應用 課程影片

25:30



C Programming
進階C語言應用 課程影片

57:27

W16-1 C Programming Linked List Part I #鏈結串列...
觀看次數：8756次 · 2 年前

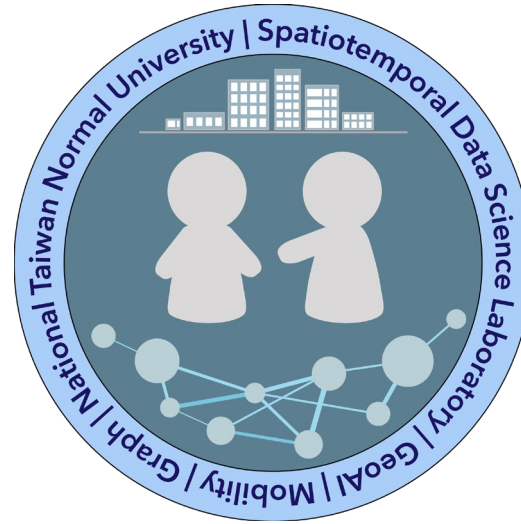
W02-1 C Programming - Environment setting and...
觀看次數：5269次 · 2 年前

W11 C Programming File Processing #讀寫檔案 #讀...
觀看次數：4245次 · 2 年前

W15-1 C Programming Struct Part I #結構 #struct...
觀看次數：3282次 · 2 年前

W16-2 C Programming Linked List Part I #鏈結串列...
觀看次數：2043次 · 2 年前

W02-2 C Programming - Variables & Loop #變數 #迴圈
觀看次數：1812次 · 2 年前



The End

Thank you for your attention!

Email: chchan@ntnu.edu.tw

Web: toodou.github.io

