

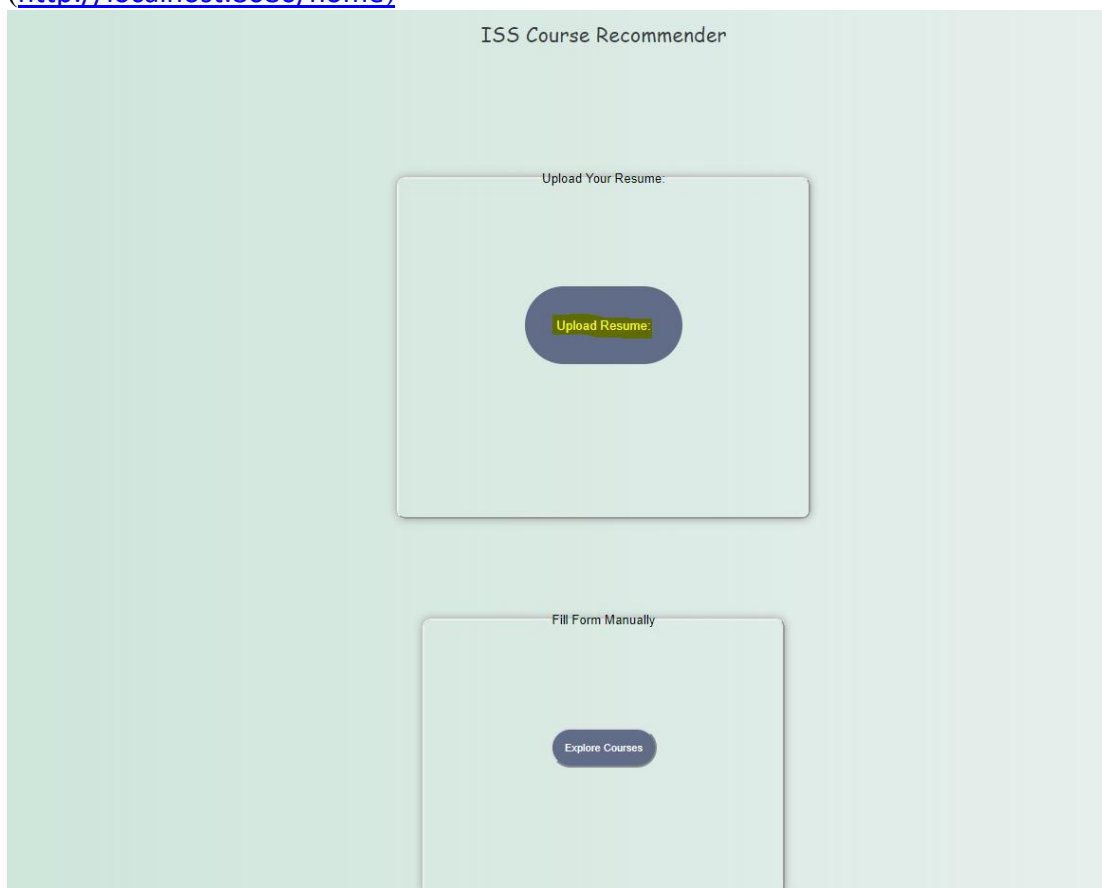
User Guide

This user guide is provided in order to give an insight of how ISS Course Recommender works. It takes through an example of how to derive course recommendations based on user input.

Input is gathered from both the users resume (docx/PDF format). The data is parsed and populated in the forms presented for data collection. This is followed by the customer filling in the missing data. The customer can alternatively fill the form and avoid uploading his/her resume. Based on his inputs the relevant pre-requisites are identified and fed into a Drools engine. Based on pre-derived rules, a recommendation is provided to the user from which he can select his required courses. His required courses are then fed to an Optaplanner, which selects the best course dates to avoid overlap and spread out your courses more evenly. The user is then presented with this optimal proposal.

The following are the steps to generate recommendations:

1. Go to ISS Course Recommender home page where you can upload your resume (<http://localhost:8080/home>)



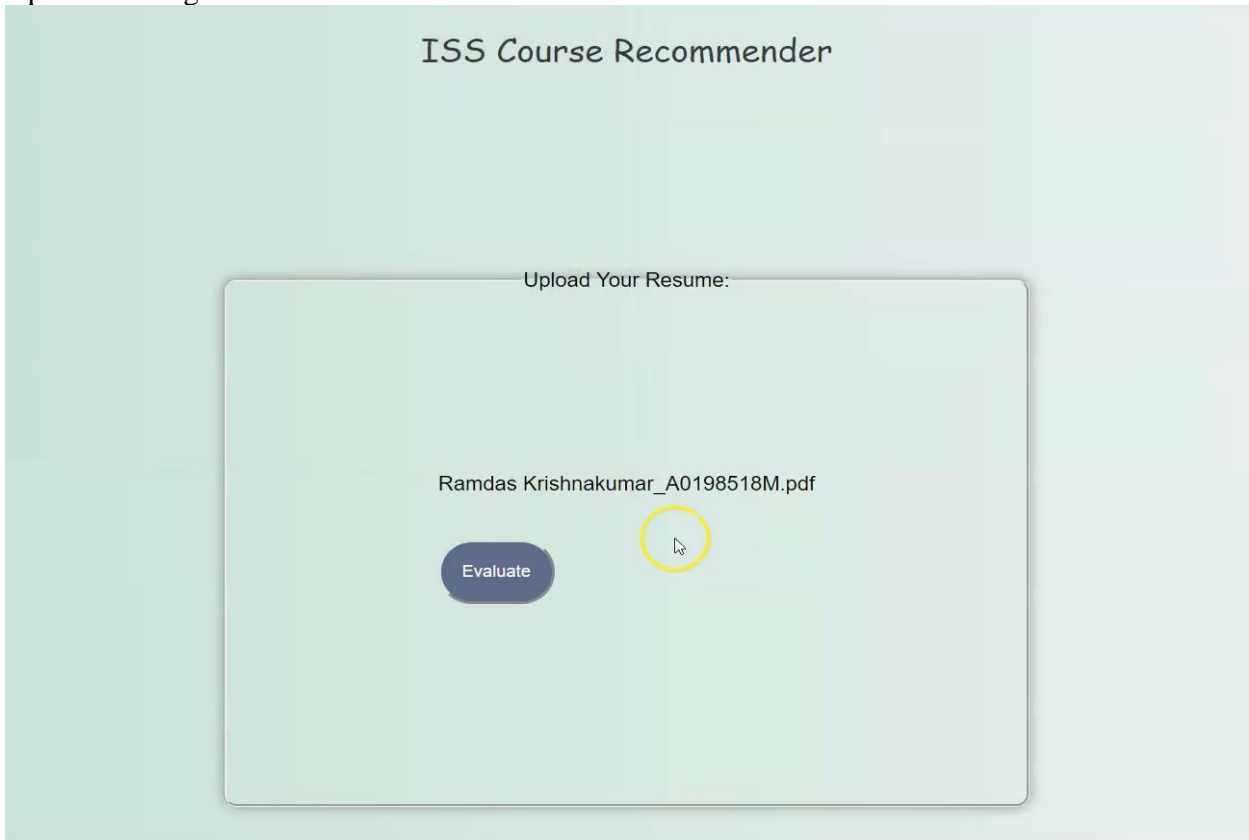
2. Upload file to given location and click on evaluate

ISS Course Recommender

Upload Your Resume:

Ramdas Krishnakumar_A0198518M.pdf

Evaluate



3. Select interested field by reading the descriptions and click on search course

ISS Course Recommender

Career-Start-in Artificial Intelligence

Search Courses

Artificial Intelligence

Harness the full potential of data and analytics to gain a competitive edge in today's business climate.

ISS provides a comprehensive suite of Artificial Intelligence courses that will empower participants with the capability to make data driven and evidence-based decisions. These assets are pivotal in the development of effective strategic solutions and the effort to achieve greater competitive advantage. The range of available courses includes the NICF- Statistics Bootcamp. This foundation course will equip participants with the capability to use R in their statistical analysis to facilitate more accurate and effective data-driven decisions. Another course on offer is the NICF- Social Media Analytics, an intermediate level course, where participant will acquire the skill to interpret social media data and produce effective actions based on the analytics.



4. Check and verify the auto-populated data

ISS Course Recommender

Personal Information:

Name

Ramdas K

Email

krandas1996@gmail.com

Age

Professional Information:

Work Experience

9

Key Positions Held

innovation managers,it developer,data scientist

Technical Skills

c++,iot,digital experience,shell scripting,software tools,programming,c#,python,health domain,object oriented,probability,education domain,web analysis,algebra,spark,product development,engineer,data tools,vector calculus,statistical software,statistics

Educational Information:

Degree Held

Bachelors of Science

Submit

5. Enter missing data and click on Submit

ISS Course Recommender

Personal Information:

Name

Ramdas K

Email

krandas1996@gmail.com

Age

23

Nationality

☒ Foreigner ☐ PR ☐ Citizen

Fee Funding

☒ Self ☐ Company Sponsored

Professional Information:

Work Experience

2

Key Positions Held

innovation managers,it developer,data scientist

Technical Skills

c++,iot,digital experience,shell scripting,software tools,programming,c#,python,health domain,object oriented,probability,education domain,web analysis,algebra,spark,product development,engineer,data tools,vector calculus,statistical software,statistics

Educational Information:

Degree Held

Bachelor of Technology

Submit

6. Review recommended course. Click on each course recommended to read more on the Course

ISS Course Recommender

NICF- Intelligent Sensing and Sense Making (SF)

NICF- Machine Reasoning (SF)

NICF- New Media and Sentiment Mining (SF)

NICF- Pattern Recognition and Machine Learning Systems (SF)

NICF- Problem Solving using Pattern Recognition (SF)

NICF- Reasoning Systems (SF)

NICF- Robotic

NICF- Intelligent Sensing and Sense Making (SF)

Reference No

CRS-Q-0035259-ICT

Duration

4 days

Introduction

Sensor and sensing technology has emerged as the primary enabling technology for a wide range of applications over the past decades, and will continue to contribute to be the core component of future technologies, such as multimedia systems, Internet of Things, control system, as well as cross-disciplinary applications with pattern recognition and artificial intelligence. This intelligent sensing and sense making course presents the core theory and algorithms of signal processing fundamentals, and practical signal processing skills and strategies for real-world industrial implementations through workshop sessions. In this 4-day course, participants will learn two key skills: (i) Performing analysis of sensor data using spatial filtering and frequency and statistical analysis; (ii) Building Intelligent systems that utilise advanced signal and sensor data processing. At the end of this course, students will be able to build intelligent systems such as smart machine diagnostic systems, smart healthcare monitoring systems, etc. This course is part of the Artificial Intelligence and Graduate Certificate in Pattern Recognition Systems Series offered by NUS-ISS.

Prerequisite

This is an intermediate course and is applicable for professionals engaged in the following areas: Data Scientist, Software Engineer, System Architecture, who need sensor signal processing skills to design and build systems that make decisions by recognizing complex patterns in data. IT professionals, who are managing projects and products related with intelligent sensing systems. Pre-requisites Previous knowledge of signal processing will be helpful Participants should have intermediate skills in Python programming. Participants without Python programming knowledge may consider attending the NICF- Python for Data, Ops and Things (SF) course offered by NUS-ISS. Participants are required to bring their own internet enabled computing device & power charger to access and download e-courseware in PDF e-copies. We will be providing only e-courseware in PDF e-copies and will not issue any more paper copies.

What would you learn?

At the end of the course, the participants will be able to: Identify needs of intelligent sensing technology in various industrial applications; Acquire knowledge of core intelligent sensing theories, analyze various signal processing models and algorithms; Design, apply and evaluate the performance of various intelligent sensing and sense making techniques.

Agenda

This course will cover: Introduction to intelligent sensing systems; Foundations of sensor signal processing in spatial and frequency domain; Statistical sensor signal analysis; Sensor signal processing using machine learning technique; Design and build sensor signal processing system to make sense of sensor data.

Fees(Net)

\$3852.0

Fees(Concession)

\$3852.0

Exam Fee

\$50.0

Submit

7. Select interested courses from the list recommended courses and click on submit.

ISS Course Recommender

NICF- Intelligent Sensing and Sense Making (SF)

NICF- Machine Reasoning (SF)

NICF- New Media and Sentiment Mining (SF)

NICF- Pattern Recognition and Machine Learning Systems (SF)

NICF- Problem Solving using Pattern Recognition (SF)

NICF- Reasoning Systems (SF)

NICF- Robotic

NICF- New Media and Sentiment Mining (SF)

Reference No

CRS-Q-0034007-ICT

Duration

4 days

Introduction

Do you have a lot of textual data from various sources like customers, internal documents, emails, news articles and the social media that comes in fast and furious? Do you want to extract meaningful opinions and sentiments from these textual data automatically? This course further extends the knowledge and skillsets built by the NICF - Text Analytics (SF) course. It equips the attendee with the necessary skillsets to design sentiment analysis system and apply them in various social fields. The ability to process and analyse voluminous textual data provides the participants an edge in this new media age. The objective of this course is to introduce participants to sentiment analysis and its applications. Participants will gain the requisite skills to evaluate the supervised learning algorithms for sentiment classification. They will be able to evaluate and analyse granular meaning of texts from documents and articles. The course will assume that the participants have good knowledge of text analytics and techniques, and some hands on experience of modelling using these techniques using Python. Participants are also expected to have knowledge of statistics at the level of the NICF - Statistics Bootcamp (SF) course. This course is part of the Artificial Intelligence and Graduate Certificate in Practical Language Processing Series offered by NUS-ISS.

Prerequisite

This is an intermediate course, suitable for professionals with an interest or requirement to understand digital marketing and social engagement for customers. It is applicable for professionals engaged in the following areas: Customer analysts performing deeper analytics on sentiment analysis on customer feedbacks and reviews Data scientists in financial services doing applied sentiment mining for applications in finance including fraud, trading. Data analysts in the financial services who use internal research and external news for research. Analysts who want to automate and extract insights from the voluminous internal and external textual documents in their organisations Prerequisites Participants who have successfully completed NICF 877 Text Analytics (SF) course offered by NUS-ISS Note Participants are required to bring their own internet enabled computing device (laptops, tablet etc) & power charger to access and download electronic courseware in PDF format. We will be only providing courseware in PDF and will not issue any printed copies

What would you learn?

At the end of the course, the participants will be able to: Identify where sentiment analysis can be applied Evaluate and analyse the classification techniques for sentiment classification and apply it with open source libraries Design a sentiment analysis system for customer feedback and reviews Design a sentiment analysis system for news and social media for applications in finance Evaluate and assess sentiment analysis at a granular level for entities and aspects

Agenda

Introduction to sentiment analysis and its applications in various social domains. Overview of related tasks of NLP to sentiment analysis Supervised learning classification algorithms for sentiment analysis Entity and aspect mining for sentiment analysis Sentiment visualization tools Applications of sentiment analysis to customer analytics and financial applications Sentiment analysis and its psychological basis

Fees(Net)

\$3852.0

Fees(Concession)

\$3852.0

Exam Fee

\$50.0

Submit

8. Wait for the Optaplanner to finish schedule optimization. Review Optimal Course Recommendation.

ISS Course Recommender

List of Recommended Courses with their respective Schedule.

NICF- Machine Reasoning (SF)

| | |
|------------|-----------------|
| Class Name | Class 1 |
| Class Time | 9:00am - 5:00pm |
| Start Date | 2019-08-22 |
| End Date | 2019-08-27 |

NICF- New Media and Sentiment Mining (SF)

| | |
|------------|-----------------|
| Class Name | Class 1 |
| Class Time | 9:00am - 5:00pm |
| Start Date | 2019-10-29 |
| End Date | 2019-11-01 |

NICF- Pattern Recognition and Machine Learning Systems (SF)

| | |
|------------|-----------------|
| Class Name | Class 1 |
| Class Time | 9:00am - 5:00pm |
| Start Date | 2020-01-06 |
| End Date | 2020-01-30 |