#### 臺灣大學應用力學研究所112學年度第2學期業師職涯講座(I)

#### 一、目的:

邀請在產業界曾任主管職之應用力學研究所畢業校友擔任本所業師,提供學生產業界狀況諮詢服務,以利學生職涯發展。

#### 二、邀請講座:

賴孟煌校友 (應力所碩士班1999畢業)

### 曾任:

台達電子工業(股)經理1999/09~2003/11Theta MicroCountry Manager2003/11~2004/09瑞昱半導體(股)經理2005/01~2008/09希捷科技資深經理2008/09~2009/03旺玖科技(股)資深經理2009/06~2011/03

現任:

愛盛科技股份有限公司 董事長兼執行長 2011/06~now

台灣磁性協會 理事 2014~now

### 三、 時程、地點:113年02月26日(星期一)

時間	內容	地點	備註
14:20~15:30	團體諮詢:學業與就業的	國際會議廳	
	契合		
15:30~17:00	個別或小組諮詢:產業概	國際會議廳	每時段15分鐘
	況與就業準備		

## 四、 報名:

若同學擬於團體諮詢時提問問題,或擬報名個別(小組)諮詢,敬請於113年02月25日前上網登記(https://forms.gle/qAEwgXa7seRCWtpBA),個別(小組)諮詢以先登記先分配方式進行。

五、 聯絡人:廖珮嵐小姐(3366-5606)

# The Future of Sensors - AI Sensor Applications in Edge Computing

## Meng-Huang Lai

#### Abstract

Sensors play a key role as transducers, converting physical quantities into digital data for edge computing. This article discusses the application of (AI) sensors in edge computing for real-time decision-making and power consumption re-duction. Conventional sensors tend to overload edge devices with unwanted data such as interference, false alarms, and coupling data, thereby hindering real-time responses. In contrast, AI sensors utilize the data screening technique, which offers a solution by selectively sending only relevant data to edge computing devices. By integrating multiple sensing elements and adaptable algorithms, AI sensors enable real-time decision-making with precise responses and reduce power consumption in a wide range of applications. This article describes the architecture of AI sensors and highlights their advantages over conventional sensors, specifically in current sensor applications utilizing magnetic sensors. Through simulations, the effectiveness of AI sensors in combining multiple sensing elements and embedded algorithms was demonstrated. The integration of AI sensors and edge computing elevates the capabilities of devices for mission-critical applications.

The contents of presentation are as follows:

- 1. Company and personal introduction
- 2. The definition of the magnetic sensor
- 3. Industry trend of magnetic sensors
- 4. Application case: AI application for current sensing utilizing magnetic sensor
- 5. Sharing of personal experiences.