Keynote 3

Research of the School of Computer and Information Engineering

Shaojing Song
School of Computer and Information Engineering
Shanghai Polytechnic University, China

sjsong@sspu.edu.cn

Abstract

School of Computer and Information Engineering was established in 2002. The school consists of 4 departments including the Department of Computer Science and Technology, the Department of Software Engineering, the Department of Artificial Intelligence, Department of Information and Communication Engineering. The school has taken the lead in building the university' s post-graduate program in Electronic Information. The school has nearly 80 post-graduate supervisors whose research topics cover big data, computers and artificial intelligence, image processing and machine vision, distributed computing, Software engineering, Cybersecurity, etc. The school has completed 3 National Natural Science Foundation of China (NSFC) General projects, 8 National Natural Science Foundation of China (NSFC) Youth projects, and 4 Shanghai Natural Science Foundation of China (NSFC) projects. We awarded 1 Magnolia Talent Plan, 2 Talent Plan in Shanghai Rising-Star Program supported by the Shanghai Municipal Education Commission (SMEC) and Shanghai Educational Development Foundation (SEDF), and 2 Chenguang Plan supported by SMEC and SEDF. As an example of our research, this presentation will show the latest research on vehicle-to-infrastructure collaboration and heterogeneous point cloud registration, including a novel coarse-to-fine approach to heterogeneous point cloud registration (C2F-HPCR), establishing the inaugural benchmark for point cloud registration in intricate vehicle-infrastructure collaboration contexts.

Biography

Shaojing Song is a professor at Shanghai Polytechnic University, he serves as Vice Dean of the School of Computer and Information Engineering. His research interests encompass intelligent measurement and control systems, machine vision, data communication, and intelligent driving systems. Professor Song is an active member of several professional organizations, including the China Computer Federation, the Society of Automotive Engineers of China, and the Shanghai Institute of Electronics. He has made significant contributions to the fields of image processing and analysis, pattern recognition, and intelligent control systems based on visual systems. He has published over 20 papers in core domestic and international journals and conferences, with 10 papers indexed by SCI and 4 papers by EI. He has led 8 research projects and participated in 3 projects, including a project which received the Second Prize in the National Science and Technology Progress Award. Additionally, he holds 5 authorized national invention and utility model patents and 3 software copyrights.

Keynote 4

Deep Learning Platform + Large AI Models Accelerates Industrial Intelligence

Longzhi Wang
Software Engineer of Beijing Baidu Netcom Science Technology Co., Ltd.

wanglongzhi@baidu.com

Abstract

This presentation is about Large Language Models (LLM) Usher in a New Era of Artificial General Intelligence. Baidu' s Ernie Bot Large Language Model will be introduced, and following that its diverse range of application scenarios will be discussed. Notably, Ernie Bot has extremely strong comprehension and reasoning capabilities, and topped the Chinese benchmark CharacterEval, while empowering various business scenarios of Baidu, spanning from Baidu Search to Baidu Comate and Baidu Translate. In addition, the industry-level deep learning framework – PaddlePaddle will be demonstrated to show how it efficiently propels and accelerates the training and inference processes of Ernie Bot.

Biography

Longzhi Wang is working on LLM inference acceleration and Paddle deep learning framework development as a software engineer at Baidu. His research interests include computer vision and natural language processing. Longzhi holds a BSc. from Hangzhou Dianzi University and an MSc. from the University of Electronic Science and Technology of China.