Shangcheng Jin

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EDUCATIONAL BACKGROUND

Nanjing University of Aeronautics and Astronautics, Jangsu, China **Septemper,2019 to June,2023**
Changkong College **Bachelor** of Engineering
Computer Science and Technology (**Honor Class**)
GPA: **4.3**/5.0
Ranking in Class: **1**/19
Ranking in College of Computer Science and Technology: **2**/120(**1.67%**)
Under The Supervision of **Kun Zhu**, Ph.D., Professor

RESEARCH EXPERIENCE

Unmanned System Collaborative Perception **Advisor:** Kun Zhu, Ph.D., Professor **3/2022-Now**

- A vision-based unmanned system collaborative perception platform.
- I'm responsible for the development of Turtlebot3 Waffle Pi and the deployment of ORB-SLAM3 and CCM-SLAM algorithm.
- I work with other seniors in the lab to make an autonomous driving dataset.

Brain-Controlled Robotic Arm Based On SSVEP-BCI **Advisor:** Daoqiang Zhang, Ph.D., Professor **4/2021-2/2022**

- I'm responsible for the issues about the use of Neuracle's products, the visual stimulus interface, and the classification algorithm.
- The entire project is a conversion of multiple signals such as visual stimulation signals, EEG signals, digital signals, and analog signals.

Intelligent Quadcopter Drone **Advisor:** Lei Lei, Ph.D., Professor **5/2021-7/2021**

- I'm familiar with the basic mechanical structure design and the assembly of the Quadrotor Drone.
- I'm responsible for multiple modules such as vision module, ultrasonic module, steering gear module and flight control module.
- I solve the problems such as identification starting point and end point, color block color identification, QR code identification, ultrasonic module connection, steering gear control, flight control code modification and other issues.

Tunnel Disease Detection Based On Deep Learning **Advisor:** Jun Wang, Ph.D., Professor **3/2021-3/2022**

- I'm responsible for the acquisition and preprocessing of the image datasets and the labeling of image datasets
- I have a preliminary understanding of how to apply deep learning technology to actual application requirements.

Campus Hongmeng IoT Platform **Advisor:** Pengfei Huang, Professor **12/2021-4/2022**

- I'm responsible for the deployment of the system and the design of the front-end module
- This system is a secondary development of the HC open sources community.
- I have a preliminary understanding of aspects such as the development of front-end and back-end, the communication between front-end and back-end data, and database management.

Academic Scholarships /Honours/ Competition Awards

Academic Scholarships & Honours:

- April 2022, Top 100 Young Students, Nanjing University of Aeronautics and Astronautics
- March 2022, Scholarship of Academic Excellence, First Prize, Nanjing University of Aeronautics and Astronautics
- December 2021, Alumni Association Scholarship, Nanjing University of Aeronautics and Astronautics
- December 2021, Scholarship for Outstanding Student, First Prize, Nanjing University of Aeronautics and Astronautics
- December 2021, Scholarship of Academic Excellence, First Prize, Nanjing University of Aeronautics and Astronautics
- December 2021, Merit Student, Nanjing University of Aeronautics and Astronautics
- December 2020, Scholarship for Outstanding Student, Second Prize, Nanjing University of Aeronautics and Astronautics
- December 2020, Merit Student, Nanjing University of Aeronautics and Astronautics
- December 2020, Excellent Student Cadre, Nanjing University of Aeronautics and Astronautics
- May 2020, Scholarship of Academic Excellence, Second Prize, Nanjing University of Aeronautics and Astronautics

Competition Awards :

- December 2021, The Chinese Mathematics Competitions, Third Prize, Chinese Mathematical Society
- November 2021, Electronic Design Contest, Second Prize, The Organizing Committee of Jiangsu Division of National Undergraduate Electronic Design Competition
- November 2021, Mathematical Contest in Modeling, Third Prize, Organizing Committee of Jiangsu Division of National Mathematical Contest in Modeling
- July 2021, CSEE Cup, First Prize, Chinese Society For Electrical Engineering
- July 2021, The 2nd Inter-school College Students' Innovation and Entrepreneurship Training Camp, Second Prize, Engineering Training Center of Xi'an University of Technology
- June 2021, Higher Mathematics Competition in Jiangsu Province, Third Prize, Assocation for Mathematics Education in High Schools, Jiangsu Province

- June 2021, May Day Mathematical Contest in Modeling, Second Prize, JSIAM
- June 2021, Mathematical Contest in Modeling, First Prize(Top1), Nanjing University of Aeronautics and Astronautics
- May 2021, Mathematics Competition(Top7), Nanjing University of Aeronautics and Astronautics
- December 2020, The Chinese Mathematics Competitions, Second Prize, Chinese Mathematical Society

OTHER INFORMATION

- Language：CET-4(588), CET-6(511)
- Deputy Director of Student Science and Technology Association of Changkong College, Nanjing University of Aeronautics and Astronautics **9/2021-4/2022**
- Instructor, Learning Support and Tutoring Center, Changkong College, Nanjing University of Aeronautics and Astronautics **9/2021-4/2022**
- Director of Technical Propaganda Department of College Student Science and Technology Association, School of Materials Science and Technology, Nanjing University of Aeronautics and Astronautics **9/2020-6/2021**

金尚程

中共预备党员

电话：15867713380

邮箱：jinshangcheng@nuaa.edu.cn

教育背景

学校：南京航空航天大学　　**专业：**长空创新班(主修计算机科学与技术)　　**2019.09-2023.06**

主修专业排名：1/19　　**对应专业大类：**2/120（1.67%）　　**GPA：**4.3/5.0

本科阶段学术导师：朱琨教授

核心课程：

编译原理I	计算机网络	操作系统	数据库原理	算法设计与分析
机器学习	数据结构	模式识别	信息检索与数据挖掘	计算机组成原理
电子线路A	信号与系统A	现代电子技术A	微机原理与应用	工程图学A

所获荣誉：校友会奖学金（全院唯一）　优秀学生奖学金一、二等奖　学业奖学金一、二等奖

校百佳青年　校三好学生　校优秀学生干部

英语水平：CET-4(588分)　CET-6(511分)

科研项目

- **无人系统协同感知**　　**导师：朱琨教授**　　**2022.03-至今**

基于UZ-SLAMLab实验室ORB-SLAM系列以及VIS4ROB-Lab实验室CCM-SLAM开源代码以及Turtlebot3WafflePi无人小车群，部署一个基于ROS的无人系统协同感知平台。我为项目负责人，负责无人小车群组装、ORB-SLAM3的部署、以及相关的数据集的制作。

- **基于SSVEP-BCI的脑控机械臂平台**　　**导师：张道强教授**　　**2021.04-2022.02**

本作品是一款基于稳态视觉诱发电位(SSVEP)刺激范式的脑-机接口系统。我为项目第二负责人，负责了Neuracle相关产品软硬件配合与kinova jaco2机械臂使用，参与了视觉刺激界面的编写以及脑信号分类算法编写。

- **智能无人机**　　**导师：雷磊教授**　　**2021.05-2021.07**

我为项目团队的队长，主要负责了四旋翼无人机系统的组装、飞控代码的编写与调试、视觉模块，掌握了四旋翼系统软硬件设计、开发和调试能力，培养了建立解决四旋翼无人机所涉及复杂工程问题的能力。

- **基于深度学习的隧道病害检测**　　**导师：汪俊教授**　　**2021.03-2022.03**

该作品利用深度学习技术能够对隧道表面进行检测及时发现病害。我为项目组员，主要负责了图像数据集采集、图像数据集预处理、图像数据集打标签以及相关文档的撰写。

- **校园鸿蒙物联平台（计算机设计大赛作品）**　　**导师：黄鹏飞教授**　　**2021.12-2022.04**

该作品是一款应用于校园多个场景、搭载华为云平台生态的集成物联网平台。我为项目组员，主要负责了系统部署、前端模块的设计与后期作品展示视频制作。

竞赛获奖

省/部级

- **第十三届全国大学生数学竞赛（非数学类）三等奖**　　**2021.12**
- **全国大学生电子设计竞赛江苏赛区省级二等奖（赛题：G植保无人机）**　　**2021.11**

主要负责无人机的视觉模块、超声波模块、舵机模块以及飞控模块，解决了无人机识别起点、终点，色块颜色识别，二维码识别，超声波模块接入，舵机控制，飞控代码修改等问题，出色完成预期任务。

- **2021年高教社杯全国大学生数学建模竞赛本科组江苏赛区三等奖**　　**2021.11**
- **第十三届“中国电机工程学会杯”全国大学生电工数学建模竞赛一等奖**　　**2021.07**
- **西安理工大学第二届跨校大学生双创训练营二等奖（第二名）**　　**2021.07**
- **江苏省高等学校第十八届高等数学竞赛本科一级A组三等奖**　　**2021.06**
- **第十二届全国大学生数学竞赛（非数学类）二等奖**　　**2020.12**

校级

- **2021年数学建模竞赛校内选拔赛一等奖（第1名）**　　**2021.06**
- **第八届南京航空航天大学高等数学竞赛（非数学）专业一等奖（第7名）**　　**2021.05**

社会实践与学生工作

- **不忘初心、旗帜飘扬，走进温州瑞安国旗教育馆（社会实践项目）**　　**2020.12-2021.03**

团队获得“南京航空航天大学长空学院大学生社会实践优秀团队荣誉”。

- **百问百答，科技成册（“淬炼红心”专项优秀团队）**　　**2020.06-2020.09**

团队获得“南京航空航天大学社会实践“淬炼红心”专项优秀团队（全院唯一）。

- **任南京航空航天大学长空学院大学生科学技术协会副主任**　　**2021.09-2022.04**

主办了“学长创新说”、开展专业文化节、举办大创宣传系列活动，带领长空学子思创新、行创新、勇创新。

- **任南京航空航天大学长空学院学习支持辅导中心教员**　　**2021.09-2022.04**
- **任南京航空航天大学材料科学与技术学院大学生科学技术协会技术宣传部部长**　　**2020.09-2021.06**