

Wenxiao(Robin) Cai

Phone: (+86)18051964139 Email: robincwx@foxmail.com
Website: <https://russrobin.github.io> Addr: Wolonghu Town, Nanjing

EDUCATION

Southeast University(SEU), Nanjing, China

Sep 2020 – Present

B.S. in Engineering, Automation (in progress)

GPA 3.96/4 RANK 1/112

University of California, San Diego(UCSD), San Diego, United States

Mar 2023 – Present

Exchange Student(in progress)

Honors:

- Presidential Scholarship | SEU • Perfection Student Scholarship, 2021 and 2022 | SEU
- University-level Merit Student | SEU • CUPT First Prize in East China
- Presidential Scholarship | High School Affiliated to Nanjing Normal University

Related Coursework:

- Artificial Intelligence • Algorithms • Data Structure • Optimization • Software
- Algebra and Geometry • Signal Processing • Natural Language Processing • Microcomputer
- Machine Learning with R (UCLA 2021)

Services:

President of SEU LabVIEW Club

RESEARCH EXPERIENCES

Computer vision researcher at OneCoLab

SEU | July 2021 – Present

- Worked with Prof. Wankou Yang on drone image processing.
- Designed a novel method for drone image stitching aided by semantic information. *First-authored paper currently under review in Journal of Visual Communication and Image Representation from Oct 2022.*
- Collected and annotated a drone image dataset for semantic segmentation. *First-authored paper currently under review in ICCV 2023.*

COURSE PROJECTS

Article key sentence extraction software

Jan 2021 – June 2021

- Designed a machine learning algorithm based on AP, Kmeans and mean-shift to extract key sentences from articles.
- Developed a PyQt-based software with full file reading, language processing and parameters setting functions.

Packing problem algorithm in industrial applications

July 2021 – Sep 2021

- Designed a novel algorithm to solve NP-hard packing problems.
- Developed a software of processing and 3D display of packing problems, and applied it in a factory in Nanjing.

Optimization of AGV scheduling problem

Sep 2021 – Jan 2022

- Built a model for, simulated and visualized Automated Guided Vehicles (AGV) operations in logistics factories with Matlab Simulink • Optimized the problem in limited conditions

SKILLS

- Programming Languages: Python, C, C++, Matlab, R, Assembly
- Languages: English - Fluent(TOEFL 108, GRE 330), Mandarin - Native speaker