许钜森

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学历：本科 大四在读

求职意向：结构设计

教育背景

2022~2026(预定毕业)　香港科技大学　**综合系统与设计 本科**
机器人学 辅修

在校学习内容

- 系统性设计，系统性思考，快速原型制作，概率导论，计算机网络，Python，C/C++ 数据结构
- 3D设计与动画，材料与设计，机械电子学，人工智能，机器学习等

个人经历

2021~2025　3D打印机、CNC的DIY经验

- 靠个人爱好购置diy套件并组装过多台开源3D打印机，一台开源CNC铣床等
- 熟悉掌握打印机结构和打印机运动学，熟悉linux基础操作
- 自学并熟练Solidworks， 对打印机开源社区有部分贡献配件设计
- 熟练掌握FDM，CNC零件设计，针对工艺优化结构降低成本
- B站偶尔经营3D打印机和CNC相关内容，总播放数5万
- 自研NW行星减速箱，摆线减速箱

2022-2026　专业课 课设经历

- 大二专业课设：购物机器人；初期担任市场调研，后期主导机器人的完整结构设计与嵌入式软件开发
- 大二原型机课课设：水下仿生机器人；负责完整结构与硅胶模具设计、基于舵机线驱的仿生鱼尾，课设第一名
- 大三专业课设：网球机器人；担任项目管理职位，主导机器人完整的结构设计与嵌入式程序开发，基于ESP-IDF和FreeRTOS编写电机、编码器等驱动库，对接上位机串口通讯等，打通 设计-生产-嵌入式-算法 开发流程。
- 大四专业课设：全地形轮椅，担任项目管理，负责完整结构设计，载人负载校核等；熟悉面向生产设计理念

2025-至今　实习经历

- 担任深圳科创学院挑战营助教，带领学生定义问题与解决问题，开发按摩手套。受评为明星助教。

2023-至今　比赛经历

- 参与Robomaster机甲大师高校联盟赛与超级对抗赛担任机械岗位
- 24赛季哨兵机器人机械研发代表，负责外观工业设计与完整底盘结构开发
- 25赛季担任机械部门培训讲师和助教，主要教学结构建模和面向生产设计概念
- 25赛季舵轮步兵机器人研发代表，负责完整的底盘结构和舵轮组开发
- 25赛季设计基于M3508电机的NW减速箱，成为全阵容车组标配

个人标签

电影、追剧、美食、日语
技术宅、工程师、手工、强迫症

自我评价

我性格开朗，具备出色的沟通能力，对热爱的事物充满激情，乐于迎接挑战，并始终保持积极乐观的态度。我喜欢与人交流并分享我的想法，这使我在团队合作中游刃有余。同时，我也注重自我提升，不断学习新知识和技能，以适应快速变化的环境。在面对困难时，我能够冷静分析，寻求解决方案，并坚信每一次挑战都是成长的机会。无论是在工作还是生活中，我都愿意全力以赴，追求卓越。

XU JUSEN

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Age: 22 Undergraduate

EDUCATION BACKGROUND

2022~2026(Estimated) HKUST **Integrative System and Design**

LEARNING CONTENT

- System thinking, System design, Fast prototyping, Probabilities, Computer network, Python, C/C++ Data structure, 3D design, Material and design, Mechatronics, Machine learning

RELEVANT EXPERIENCE

2021~2025 DIY Projects | 3D Printing & CNC Expertise

- Assembled and optimized multiple open-source 3D printers and a CNC milling machine through self-directed learning.
- Mastered printer kinematics, structural mechanics, and FDM-oriented part design; proficient in Linux operations.
- Achieved advanced SolidWorks skills via self-study; designed and contributed functional components to open-source communities.
- Created technical content (3D printing/CNC tutorials) on Bilibili, amassing 50,000+ total views.

2022-2025 Academic Engineering Projects

- **Tennis Ball Collector Robot (2024–Present |Core Course Project)**
  - Project Lead: Spearhead mechanical design and embedded development using ESP-IDF & FreeRTOS.
  - Developed motor/encoder/controller driver libraries and implemented UART communication protocols for PC-robot interface.
- **Bionic Underwater Robot (2023 | Prototyping Course | 1st Place Award)**
  - Innovated servo-actuated cable-driven biomimetic tail mechanism with patented waterproof sealing structure.
- **Shopping Assistant Robot (2023 | Core Course Project)**
  - Conducted market research to identify user pain points and conceptualized robot solution.
  - Led mechanical lift design and co-developed embedded control software.
- **RoboMaster Competition (2022–2024 | Mechanical Engineer)**
  - Sentry Robot Lead Designer (2024 Season): "Turtle-Shaped" chassis appearance and compact double-wishbone suspension system for competition robot.

SKILLS

- Technical: SolidWorks (Advanced), FDM Design, Linux, ESP-IDF, FreeRTOS, C/C++, Motion Systems, Rapid Prototyping
- Languages: English (Professional), Cantonese (Professional), Mandarin (Native)
- Interests: Industrial Design, Open-Source Hardware, Precision Engineering, Cinema

PROFILE

- Innovative problem-solver with strong communication skills and a growth mindset. Thrive in challenging team environments requiring technical adaptability. Committed to continuous skill development with a meticulous attention to detail in engineering execution.