毛思诚（Sicheng Mao）

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教育经历

卡内基梅隆大学 (CMU) 2020.08—至今
电子与计算机工程硕士 GPA：**4.00**/4.00；课程：计算机系统，云计算
上海交通大学 (SJTU) 2016.09—2020.06
机械工程学士 GPA：**85.72**/100（**3.64**/4.00）；课程：C++，Python，数据结构，单片机
东京大学 (UTokyo) 2019.04—2019.08
USTEP 交换生 GPA：**4.00**/4.00；课程：机器人学，机械系应用数学

实习经历

医学影像先进技术研究院 2020.09—2021.03
科研助理（RA）
- 应用元学习在 CT 胰腺分割，提出基于 MAML 的预训练模型，在 MRI 数据集上预训练
- GAN 生成 CT 图片扩充数据集，提出层间损失函数，中心对齐法，有效提升 2%的 DSC

美团点评 2020.04—2020.07
测试开发工程师（QA）
- 设计与编写大众点评 VIP 业务消息处理、定时任务处理的场景自动化测试用例
- 负责 VIP 业务的业务治理与团队交接；完善回归测试流水线；上线与维护老拉新功能

学术经历

CMU，**高性能推特数据检索分析网络服务** 2021.02—2021.05
- 使用 Spark Scala 处理 1TB 推特数据，计算用户影响力排行，用户间亲密度，话题热门度
- 使用 MySQL 和 HBase 存储数据，Vertx 搭建网络层，实现好友推荐系统，与热推排行榜
- 处理验证区块链请求并返回加密响应

CMU，**纽约市出租车车费预测应用** 2021.03—2021.04
- 提取影响车费的特征，训练价格预测模型；结合语音/图片识别等 API，部署云端预测服务

CMU，**维基百科月度搜索量大数据分析** 2021.01—2021.02
- 使用 MapReduce 对维基百科英文站大搜索量词条进行统计；AutoScaling 模拟应对流量高峰

CMU，**动态内存分配器** 2020.10—2020.11
- 使用分离空闲循环链表动态分配内存；压缩 header/footer，设计迷你块，提高空间利用率

交大毕设，**基于视觉的喷丝板检测机器人系统设计** 2019.12—2020.06
- 双相机方案提升自动化；插值数组找最长公共子串算法解决堵塞孔问题；Qt 开发用户软件

技能与荣誉

编程语言：C/C++，Java，Python
工程软件：UG，IDEA，Qt，MATLAB，LabVIEW，ANSYS，AD
外语能力：英语，CET6 590，TOEFL 110，GRE 325；日语，N1 134
荣誉奖项：JASSO 奖学金，学生学术能力提升计划，校学业优秀奖学金*3，优秀毕业设计等

学生工作与课外活动

上海交通大学全球大使
东京港区防灾 Festa 志愿者，上海国际马拉松赛志愿者
慕尼黑大学暑期项目，两岸大学生（沪台）社区企业见习营

SICHENG MAO

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EDUCATION

Carnegie Mellon University (CMU) Remote
Master of Science in Electrical and Computer Engineering Aug. 2020 – Present
GPA: **4.00**/4.00; Coursework: *Introduction to Computer Systems, Cloud Computing*

Shanghai Jiao Tong University (SJTU) Shanghai, China
Bachelor of Engineering in Mechanical Engineering Sept. 2016 – Jun. 2020
GPA: **85.72**/100 (**3.64**/4.00); Coursework: *C++, Python, Data Structure, MCU System*
Honors: JASSO Scholarship, Academic Excellence Scholarship, Excellent Capstone Design

The University of Tokyo (UTokyo) Tokyo, Japan
USTEP Exchange Student Apr. 2019 – Aug. 2019
GPA: **4.00**/4.00; Coursework: *Robotics, Applied Mathematics for Mechanical Engineering*

PROFESSIONAL EXPERIENCE

Institute for Medical Imaging Technology Shanghai, China
Research Assistant Sept. 2020 – Mar. 2021
- Applied meta-learning to CT pancreas segmentation; pre-trained on MRI; improved DSC by 2%
- Expanded dataset through GAN; proposed inter-slice loss function and center justification method

Meituan Shanghai, China
Quality Assurance Intern Apr. 2020 – Jul. 2020
- Wrote automation test cases for VIP service; did business handover and new service launching

ACADEMIC PROJECTS

Twitter Analytics Web Service Feb. 2021 – Apr. 2021
- Processed 1 TB Twitter data with Spark; calculated user influence rankings and user relation scores
- Stored data with MySQL and HBase; built Vertx web service of user recommendation system

NYC Taxi Fare Prediction Application Mar. 2021 – Apr. 2021
- Did feature engineering; trained and deployed fare model combined with speech/image recognition

Big Data Analysis on Wikipedia Dataset Jan. 2021 – Feb. 2021
- Analyzed monthly search trends on Wikipedia using MapReduce; handled peak by auto-scaling

C Malloc Lab Oct. 2020 – Nov. 2020
- Allocated memory with segregated free list; designed compressed mini block to improve utilization

Spinneret Inspection Robot System Based on Vision Dec. 2019 – Jun. 2020
- Proposed dual-camera scheme; located blocking holes with LCS algorithm; developed Qt software

PROFESSIONAL SKILLS

Programming Languages: *Advanced* – C/C++, *Intermediate* – Java, *Intermediate* – Python
Application Software: UG, IDEA, Qt, MATLAB, LabVIEW, ANSYS, AD
Languages: English (CET6 590, TOEFL 110, GRE 325), Japanese (N1 134)

LEADERSHIP & ACTIVITIES

SJTU Global Ambassador
Volunteer, Tokyo Minato Bosai Festa, Shanghai International Marathon
LMU Munich Summer Program, Shanghai-Taiwan Community & Enterprise Camp