宋庆增

一、简介

宋庆增,**博士生导师**,副教授,博士,天津市高校"中青年骨干创新人才培养计划"人选,担任天津市智能科学与技术研究会理事等社会职务,计算机学院高性能微体系结构团队负责人。发表论文70余篇,单篇论文最高被引



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计算机学院高性能微体系结构团队主要研究方向为人工智能相关的算法、编译器,芯片设计,以及和空间智能相关的领域。团队的理念是"应用驱动,工程优先,软硬协同,加速计算",学生在读阶段会参与和领导各种工程项目,同时开发成果会以竞赛、论文和开源项目的形式呈现。实验室的学习和开发节奏较快,实验室毕业的学生就业非常好,毕业后的薪资高。对外建立了广泛的学术和工程联系,包括清华大学(合作存算一体芯片和机器人芯片)、航天下属研究所(深度学习加速器)、电科集团某研究院(语音去噪,VR)、航天下属研究所(深空探测),中航工业下属某研究所(智能驾仓)等。

二、论文

[1] Guanghao Jin, **Qingzeng Song***, Flexible brain: a domain-model based bayesian network for classification, Journal of Experimental & Theoretical Artificial Intelligence, 2021 (CCF C)

- [2] Fan Liu, Qingzeng Song, Guanghao Jin*, The classification and denoising of image noise based on deep neural networks, Applied Intelligence 50 (7) 2194-2207,2020 (CCF C)
- [3] Guanghao Jin , Fan Liu , Hao Wu , Qingzeng Song * , Deep learning-based framework for expansion, recognition and classification of underwater acoustic signal , Journal of Experimental & Theoretical Artificial Intelligence, 32 (2) , 205-218, 2020 (CCF C)
- [4] **Qingzeng Song**, Lei zhao, Using Deep Learning for Classification of Lung Nodules on Computed Tomography Images, 2017, JOURNAL OF HEALTHCARE ENGINEERING (SCI 四区)
- [5] Hao Wu, **Qingzeng Song**, Guanghao Jin, Deep learning based framework for underwater acoustic signal recognition and classification, 2018, Proceedings of the 2018 2nd international conference on computer science and artificial intelligence
- [6] 孔维刚, 李文婧, 王秋艳, 曹鹏程, **宋庆增**, 基于改进 YOLOv4 算法的轻量化网络设计与实现, 2021, 计算机工程
- [7] Fan Liu, **Qingzeng Song**, Guanghao Jin, Expansion of restricted sample for underwater acoustic signal based on generative adversarial networks, 2019, Tenth International Conference on Graphics and Image Processing (ICGIP 2018)

- [8] **Qingzeng Song,** Jiabing Zhang, Liankun Sun, Guanghao Jin,Design and implementation of convolutional neural networks accelerator based on multidie,2022,IEEE Access
- [9] Yuelong Li, Yue Xing, Zhiwei Wang, Tengfei Xiao, **Qingzeng Song,** Weiwei Li, Jianming Wang, A framework of maximum feature exploration oriented remote sensing object detection,2022,IEEE Geoscience and Remote Sensing Letters
- [10] Guanghao Jin, Yixin Hu, Yuming Jiao, Junfang Wen, **Qingzeng Song,**Improving the Performance of Deep Learning Model-Based Classification by the Analysis of Local Probability,2021,Complexity