

张义飞

研发工程师

邮箱: flynn.zhang@foxmail.com
博客: <https://blog.simplenaive.cn>
Github: <https://github.com/Yidadaa>

DOB: 20/01/97
Chengdu, China

教育背景

硕士, 电子科技大学 2018.09 - 2021.06
计算机科学与工程学院, 计算机专业

学士, 电子科技大学 2014.09 - 2018.06
英才实验学院 (工科实验班), 计算机专业

荣誉 & 奖项

研究生二等学业奖学金 2019.10
OPPO AI 挑战赛人像分割任务 决赛优秀奖 2019.04
OPPO AI 挑战赛人像分割任务 复赛第一名 2019.03
研究生一等学业奖学金 2018.10
美国大学生数学建模竞赛 H 奖 2017.02

实习 & 研究经历

- 软件开发实习生 @ 亚马逊北京 2020.07 - 至今
 - 负责移动端基础架构部存储相关的功能调研、设计和开发, 为亚马逊 MShop 客户端应用提供可靠、快速、高效的存储支持。
- 算法开发实习生 @ 腾讯深圳 AI Lab Robotics X 实验室 2019.11 - 2020.06
 - 负责开发三维重建算法, 实现实时点云数据流传输算法, 并提升动态场景下三维重建算法的可用性。
 - 优化 Elastic Fusion 三维重建算法, 使用 C++ 为该算法编写 Kinect 相机驱动, 同时负责 VoxBlox 三维重建算法与 ORB-SLAM 系统对接, 使用 C++ 编写 ROS 数据传输接口, 并调研实时数据流传输算法的性能。
 - 基于 Elastic Fusion 重建算法, 优化 GPU 到 CPU 之间的数据同步性能, 开发实时点云数据流传输以及渲染算法, 配合实时动态标定, 实现虚拟环境下的机器臂控制操作并对其实时性、丢包率等性能设计实验进行验证。
 - 关键字: 三维重建、实时数据流传输、高性能算法、C++
- 前端开发工程师 (在校远程兼职) @ 尘微科技 2017.12 - 2019.03
 - 远程参与该公司某医疗微信小程序的开发工作, 主要负责小程序首屏和社区动态流页面的开发, 协调小型团队从需求分析到上线的全套流程, 并主要解决高性能 CSS 动效实现、首屏动态布局和 Feed 流长列表优化等技术难点。
 - 关键字: 远程协作、中型项目开发经验、Git 工作流、小程序开发、Vue
- 前端开发实习生 @ 百度北京 2016.12 - 2017.05
 - 参与百度凤巢的广告智能推荐系统的前端页面开发, 负责智能词条推荐界面的开发并参与该功能的上线和后续维护工作, 掌握并熟悉 React & Redux 框架的开发流程, 产出高质量的工程代码。
 - 关键字: 团队合作、大型项目开发工作流、React & Redux、Git 工作流

开源项目 & 编程能力

leetcode-cn.com/u/yidadaa/, (C++ / Python) 全站排名 ≈ 500 2020.05
刷题量 ≈ 800 , 常用编程语言: C++ / Python, 熟练掌握常见算法与数据结构以及算法性能分析。

github.com/Yidadaa/Issue-Blog-With-Github-Action, (Vue / Javascript) ≈ 1000 lines 2020.01
基于 VuePress 和 Github Actions 功能构建的免服务器部署、SEO 友好的博客系统。

github.com/Yidadaa/Parallel-Programming-On-GPU, (CUDA / C++) ≈ 200 lines 2018.11
使用 CUDA 加速 n-body 模拟程序, 加速比 ≈ 3000 。

github.com/Yidadaa/Captcha-Deep-Learning, (Python / Keras / Tensorflow) ≈ 500 lines 2018.01
端到端验证码识别网络, 分别使用 Keras 和 Tensorflow 实现, 在测试集上达到 98% 的准确率。

github.com/Yidadaa/OPPO-Human-Segmentation, (C++ / Dart) ≈ 1000 lines 2019.03
OPPO AI 挑战赛 Demo 源码, 将人像语义分割网络经过腾讯开源的 ncnn 框架转换后部署到移动端。

github.com/Yidadaa/HUAWEI-Codecraft-2019, (C++) ≈ 1000 lines 2019.05
华为软件精英挑战赛, 车辆路径智能规划, 使用 gtest 进行单元测试, 遵循 Google C++ Style Guide。

<https://github.com/Yidadaa/P2P-Message>, (Dart) ≈ 1000 lines 2018.11
分布式系统大作业, 基于 Flutter 开发的 P2P 聊天程序, 在良好的 NAT 环境下实现纯文字聊天。

Mail: flynn.zhang@foxmail.com
 Blog: <https://blog.simplenaive.cn>
 Github: <https://github.com/Yidadaa>

Education

MSc. UESTC 2018.09 - 2021.06
 Computer Science, Dept. of Computer Science and Engineering
B.Eng. UESTC 2014.09 - 2018.06
 Computer Science, Yingcai Honors College of UESTC

Honors

Second Prize for Postgraduate Scholarship 2019.10
OPPO AI Challenge Segmentation Track Excellence Prize 2019.04
First Prize for Postgraduate Scholarship 2018.10
MCM Honorable Mention 2017.02

Experience

- **Software Engineer Intern @ Amazon Beijing** from 2020.07
 - Prototyped, designed and implemented Storage Service Module for IOS MShop client.
- **Research Software Engineer Intern @ Tencent.Inc AI Lab Robotics X** 2019.11 - 2020.06
 - Surveyed and optimized real-time 3d reconstruction algorithms, implemented Kinect camera driver for Elastic Fusion 3D reconstruction algorithm, implemented ROS message passing interface for VoxelX and ORB-SLAM.
 - Developed a real-time 3D data streaming algorithm, and optimized the latency and robustness of the algorithm.
 - Developed a virtual reality robot control system, combining 3D real-time reconstruction, dynamic calibration and high-performance 3D rendering.
- **Software Engineer (Part-Time & Remote) @ Sibbay.Inc** 2017.12 - 2019.03
 - Sibbay.Inc builds a new fitness and health data sharing community for the people, provides a private and secure health data sharing system for users and their doctors.
 - Designed and validated new features in online meetings. Built and optimized the workflow based on Github, and reviewed the code and ensured the quality of the source code.
 - Balanced requirements, UX, and deadlines in order to get most of the business value in a limited timeframe.
- **Software Engineer Intern @ Baidu.Inc** 2016.12 - 2017.05
 - Baidu FengChao is the core marketing department of Baidu.Inc, provides marketing services for over 8 hundred thousand of enterprise users.
 - Implemented the new features of Baidu advertisement system, worked with UI/UX designer, PM, QA and backend developer and bridged the gap between graphical design and technical implementation, optimized application for maximum speed and scalability, and built reusable code for future use.

Projects & Skills

github.com/Yidadaa/Pytorch-Video-Classification, (Python / Pytorch) \approx 500 lines 2019.04
Make Action Classification on Videos using CNN-RNN, achieves 80% accuracy on UFF101 Dataset.

github.com/Yidadaa/Satellite-Imagery-Segmentation-Deeplab, (Python / Pytorch) \approx 1000 lines 2019.05
Satellite Imagery Segmentation using Deeplabv3.

github.com/Yidadaa/Parallel-Programming-On-GPU, (CUDA / C++) \approx 200 lines 2018.11
Accelerate simulation of n-body problem using CUDA, 3000x faster after accelerating.

github.com/Yidadaa/Captcha-Deep-Learning, (Python / Keras / Tensorflow) \approx 500 lines 2018.01
Recognize captcha using an End-to-End CNN pipeline, achieves 98% accuracy on custom Dataset.

github.com/Yidadaa/OPPO-Human-Segmentation, (C++ / Dart) \approx 1000 lines 2019.03
Deploy deeplabv3 human segmentation model to mobile platform using Tencent NCNN framework.

github.com/Yidadaa/HUAWEI-Codecraft-2019, (C++) \approx 1000 lines 2019.05
Code for HUAWEI Codecraft 2019, contains unit testing, following Google C++ Style Guide.