YunTao Du

1997/3/6

- 2 Papers(CCF B&C)
- Highly self-motivated
- Rich experience & awards

zealscott.com
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EDUCATION

Data Science and Big Data Technology | **East China Normal University** 2016 – Now

- *GPA:*3.71/4, *Major GPA:*3.92/4, ***Rank:* 1/23 (*Top 5%*)**
- **English: IELTS 7.0 / 9**, Passed CET4/6, Mandarin (second grade A)
- *Excellent student* (twice)
- *Special & First Prize Scholarship(University Highest Award)*

Statistics (minor) | **East China Normal University** 2016 – Now

COMPETITION AND AWARDS

Paper

- Min Pu, Jiali Mao, **YunTao Du**, Gebing Shen, and Cheqing Jin, Road Intersection Detection Based on Direction Ratio Statistics Analysis, *International Conference on Mobile Data Management,* 2019.
- Jiaye Liu, Jiali Mao, **YunTao Du**, Lishen Zhao, and Zhao Zhang, Dynamic Bus Route Adjustment Based on Hot Bus Stop Pair Extraction, *Database Systems for Advanced Applications,* 2019.

Competition

- *Third prize*, China Undergraduate Mathematical Contest in Modelling(Shanghai) 2018.9
- *Third prize*, National Challenge Cup *Second prize*, Shanghai Challenge Cup 2017

PROJECTS

Road intersection detection based on trajectory data *(MDM 2019)* 2018.6 – Now

- Designing a hybrid clustering strategy (DBSCAN & Mean Shift) to extracting candidate cells and refining the location of intersections.
- Our framework can effectively detect road intersections of different sizes, outperform state-of-art methods and it is quite practical for the various road network of real-world.

Porg – A C++ MapReduce framework on web *(Available on GitHub)* 2018.5 – Now

- Constructing a distributed system with browsers as the clients based on the MapReduce programming model, which is easy to set up and scale up. The system has been deployed on 20+ computers.

Dynamic Bus Line Adjustment and Visualization System *(DASFAA 2019)* 2018.7 – 2018.12

- Developing a *Spark* cluster to deal with the transit smart card data and using postgreSQL as back-end, Baidu Map API / ECharts as front-end to build a website for visualizing the bus network and passenger volume estimation of each bus line.
- The demo can be found in zealscott.com/soda.

Urbanization evaluation system based on nighttime lighting data *(National Challenge Cup)* 2016 – 2017

- Using Logistic Regression/SVM/BP neural network to fit indicators such as population, electricity consumption with night-time lighting data, assess the level of new urbanization in China's administrative areas at various scales.

SKILLS AND INTERESTS

- Programming skills: C/C++/Python/Java/R/LaTeX scikit-learn/Pytorch
- Homepage: zealscott.com GitHub: github.com/scottdyt
- Hobbies: swimmer; 9 years experience in calligraphy; violin grade 10 (Highest)

杜云滔

1997/3/6

- 两篇学术论文（CCF B&C）
- 丰富的项目竞赛经历和奖项
- 很强的研究兴趣和自学能力

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教育经历

数据科学与大数据技术 | 华东师范大学 2016 – 至今

- 平均绩点：3.71/4，专业绩点：3.92/4，**综合排名年级第一（前 5%）**
- **雅思 7.0 / 9**；通过 CET4/6；普通话 (二级甲等)
- 校级优秀学生称号（两次）
- 特等奖学金（学校最高奖）、一等奖学金

统计学（辅修）| 华东师范大学 2016 – 至今

竞赛及获奖

学术论文

- Min Pu, Jiali Mao, **YunTao Du**, Gebing Shen, and Cheqing Jin, Road Intersection Detection Based on Direction Ratio Statistics Analysis, *International Conference on Mobile Data Management,* 2019.
- Jiaye Liu, Jiali Mao, **YunTao Du**, Lishen Zhao, and Zhao Zhang, Dynamic Bus Route Adjustment Based on Hot Bus Stop Pair Extraction, *Database Systems for Advanced Applications,* 2019.

学术竞赛

- 三等奖, 全国大学生数学建模大赛上海赛区 2018.9
- 三等奖, 第 15 届挑战杯全国大学生课外学术科技作品竞赛　二等奖, 上海市赛区 2017

项目经历

基于出租车轨迹数据的交叉路口识别 *(MDM 2019)* 2018.6 – 至今

- 设计了一种两阶段聚类算法（DBSCAN 和 Mean Shift），使用 KD 树的搜索方式至下而上提取可能的轨迹栅格区域，并提取交叉路口中心。
- 我们的算法可以有效的识别大小不同、形状各异的交叉路口中心，解决了现有算法的不足，并在多个数据集上取得了很高的准确率。同时，该算法可很好的适用于复杂的现实道路网络。

Porg: MapReduce 在浏览器上的实现 *(项目已开源在 GitHub)* 2018.5 – 至今

- 构建了以浏览器为客户端的分布式系统，主要负责 WebServer 端的研发工作。使用 MapReduce 编程模型，该系统经过 20 多台集群的测试，有很好的扩展性和易用性。

公交线路智能调配及可视化系统 *(DASFAA 2019)* 2018.7 – 2018.12

- 部署了 *Spark* 集群用于处理公交刷卡海量数据集，同时搭建了该系统的可视化网站。使用 PostgreSQL 作为数据库，百度地图 API/ECharts 作为前端开发，可近实时地展现全市公交流量、站点属性、线路推荐等监管信息。
- 该系统部署在 zealscott.com/soda 上。

城市之光: 夜间灯光遥感数据下的新型城镇化监测与评估系统 *(挑战杯二等奖)* 2016 – 2017

- 使用 Logistic Regression/SVM/BP neural network 等机器学习算法，用夜间灯光数据拟合人口、电力消耗、二氧化碳排放量等新型城镇化指标，可从不同时间空间尺度衡量全国的新型城镇化水平。

技能与兴趣

- 编程能力: C/C++/Python/Java/R/LaTeX　　scikit-learn/Pytorch
- 个人主页: zealscott.com　　GitHub: github.com/scottdyt
- 个人爱好：游泳（校游泳队队员）；书法（学习 9 年）；小提琴 10 级（最高级）