

# JIANPENG HOU

Machine Learning; Software Development

✉ houjp1992@gmail.com · ☎ (+86) 152-0000-0000 · 🔗 <https://github.com/houjp/>

## 🎓 EDUCATION

**Institute of Computer Technology, Chinese Academy of Sciences** Sep. 2014 – Jul. 2017

*Master student* in Computer Software & Theory, Rank: top 5%

**University of Science & Technology Beijing** Sep. 2010 – Jul. 2014

*Bachelor student* in Computer Science & Technology, Rank: 4<sup>th</sup>/124

## 👥 PROJECT EXPERIENCE

**Big Data Analysis Platform** (<http://159.226.40.104:18080>) Oct. 2015 – Mar. 2016

- Developed distributed algorithms(CART/GBDT/GBRT/RF) on Spark.
- Finished data mining components(Feature-Indexing/Feature-Merging/Feature-Normalization/Scoring).

**China Telecom Big Data Application Contest (1<sup>st</sup>/1112; Team Leader)** Dec. 2015 – Mar. 2016

The goal of this contest is to predict views of users with ten sites succeeding, according to four hundred million user-behavior historical records(25.38G).

- Proposed and implemented a multi-target regression algorithm on Spark. Optimized F1-score 0.8%.
- Designed and developed a probability ranking model for user classification. Optimized F1-score 0.6%.

**SIGHAN-2015 Chinese Spelling Check Task (1<sup>st</sup> Place)** Mar. 2015 – May. 2015

The goal of this task is to detect and correct spelling errors on Chinese essays.

- Handled this task with a unified framework which consisted of candidate generating, two stage candidates re-ranking and global decision making.
- Finished candidate generating model and two stage candidates re-ranking model. Optimized F1-score 18%.

## 🏢 INTERN EXPERIENCE

**DiDi Research Institute** Jul. 2016 – Sep. 2016

- Developed taxi dispatching system which used to balance the supply and demand between urban areas.
- Reconstructed the log system of dispatching based on Kafka and MySQL.

**Baidu Online Network Technology(Beijing) Co.,Ltd** Dec. 2013 – May. 2014

- Completed the multi-threaded development of LiveWDBBroom, improved the efficiency by two times.
- Completed the development of the Problems-Tracing Platform which was put into service.
- Passed the examination of Code Master(C++), certified as Good Coder.

## 🏆 ACADEMIC COMPETITIONS

*1<sup>st</sup> Place* Awarded in China Telecom Big Data Application Contest Mar. 2016

*1<sup>st</sup> Place* Awarded in SIGHAN-2015 Chinese Spelling Check Task Jun. 2015

*1<sup>st</sup> Place* Awarded in China College Students Computer Games Competition Nov. 2013

*1<sup>st</sup> Prize* Awarded in China College Students Computer Application Contest Nov. 2013

*1<sup>st</sup> Prize* Awarded in "LanQiao Cup" Software Development Contest(Beijing Division) Apr. 2012

*Silver Medal (17<sup>th</sup> / 200)* Awarded in ACM-ICPC Asia Beijing Regional Contest Nov. 2015

## ⚙️ SKILLS

- Skilled in C++, Scala, Shell. Familiar with data structures and algorithms and had good programming style.
- Experienced in development of distributed machine learning algorithms.
- Strong theoretic knowledge on data mining and machine learning.

# 夏忠林

求职意向: 机器学习 | 广告算法

✉ tinymindx@hotmail.com · ☎ (+86) 186-1126-9795 · 🔗 <http://frozenxia.github.io/>

## 🎓 教育背景

武汉大学	硕士, 计算机应用与技术	2012 – 2015
武汉大学	学士, 计算机科学与技术	2008 – 2012

## 👨‍💻 项目经历

小米 互联网商业部 / 金融策略组 2019.02 – 2019.10

研发针对互联网金融用户的人群定向模型, 提高激活率和注册率; 为金融应用研发召回策略算法, 根据不同广告位的联合回测结果, 通过随即初始启发式搜索方法, 在额定 ROI 下最优化平台收益, 该人群定向模型和召回策略算法已经投入使用。

小米 云平台 / 采风质量预警系统 2017.10 – 2019.01

以售后、客服以及销售数据为基础研发预警算法, 对产品质量问题进行快速预警; 利用爬虫获取的用户评论数据, 建立产品满意度指数。

- 实现了多维序列预测算法, 该算法与 LSTM 模型以及 Prophet 相比, 对产品销量和故障数据的预测结果误差和方差更小。
- 实现了异常检测算法, 该算法比 AnomalyDetection(<https://github.com/twitter/AnomalyDetection>) 具有更好的检测效果。
- 实现了多种情感分类算法 (基于概率图模型和基于神经网络模型), 对用户评论的情感分类准确率超过 0.92。
- 该项目获得了 2018 小米质量奖三等奖。

小米 云平台 / 用户画像表维护 2017.08 – 2017.10

维护公司用户画像宽表, 梳理上下游数据链路, 提高数据质量和可用性。经过优化之后的数据可用性从 90% 提高到 99.8%, 数据生成时间减少 65%。

小米 云平台 / Faas 系统 (<https://open.cloud.mi.com>) 2017.03 – 2017.08

为小米开放云设计并实现了基于 Kubernetes 的 Serverless 框架 Faas, 该系统支撑了小爱同学的语音 skill 调用。

- Faas 支持多种编程语言, 包括 python、java 和 js 等。
- Faas 使用消息队列实现组件解耦, 以 etcd 作为分布式锁进行全局控制, 利用预加载策略提高响应速度。

小米 云平台 / 小米生态云 (<https://cloud.mi.com>) 2015.7 – 2017.03

为小米生态云设计并实现了用户管理模块, 应用自动扩容模块, RDS 和 Cache 的 Service broker 模块以及计量与计费模块, 并参与了生态云的资源定价设计。

- 用户管理模块将用户组作为资源的唯一关联实体, 与 RBAC 控制策略相结合, 避免了用户变更带来的资源和权限管理问题。
- 自动扩容模块为平台上的 App 提供了多种扩容方案, 包括基于 metrics 的扩容策略和基于 trigger 的扩容策略, 提高了用户资源的使用效率。

## ⚙️ 个人能力

- 熟悉 C++、Scala、java、python, 熟悉基本数据结构和算法, 有良好的编程风格。
- 有丰富的基于 Spark 分布式计算框架的机器学习算法开发经验。
- 熟悉数据挖掘、机器学习、概率图模型领域基本算法。