LYU Nuochen
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EDUCATION

University of California, Berkeley **Berkeley, CA**
Department of Electrical Engineering and Computer 08/2018-now
Major in Data Science & System - Master of Engineering

University of Illinois Urbana Champaign **Urbana-Champaign, IL**
College of Engineering 08/2014-05/2018
Major in Computer Engineering - BS, Cum GPA: 3.55/4.0, Graduate with honor

INTERNSHIP EXPERIENCES

Yahoo Inc. **Champaign, IL**
Summer Software Engineering Intern *05/2017-08/2017*
- Interned in the Spark team from Yahoo Big data Hadoop product family and as Apache Spark contributor;
- Debugged, improved and revised Spark source code for both yahoo internal use and public community version. Public contribution: [SPARK-20713]https://github.com/apache/spark/pull/18819
- Built, enhanced, added sorting and searching in Spark history website page from static forms into javascript based Data table; Public contribution: [SPARK-21798] https://issues.apache.org/jira/browse/SPARK-21798

Huawei Technologies Co. Ltd **Nanjing, China**
Summer Software Engineer Intern *05/2016-08/2016*
- Made a C++ file management system that helped programmers to sort, find and classify their code on version and platform.
- Network server & client testing, software performance checking (TCP/IP), wrote server log & construction documents and online-judgment test training.

RESEARCH

Berkeley Artificial Intelligence Research (BAIR), EECS, UC Berkeley **08/2018-Now**
- Develop automated python pipeline selection based on driven discovery models (D3M) library. Build Framework in Docker, supported by MongoDB database and Ray parallel system. Research leads by Professor Dawn Song and Phd Mitar Milutinovic.
- Build machine learning primitives and pipeline for each real world dataset. Currently support regression and classification.

Intelligent Optics Laboratory, ECE, UIUC **09/2016-05/2017**
- Built an depth blending algorithm using Matlab to eliminate 3D disorder in Virtual-Reality 3D display;
- Made a two layer virtual reality gear prototype with three undergrads sponsored by Huawei USA;
- Paper(Acknowledged Contributor): "Optical mapping near-eye 3D display with correct focus cues", Opt.Lett. 42, 24752478(2017).

Web Data Mining: University Career Guide Book **03/2017-05/2017**
- Build a multi-process & multi threaded web crawler with python selenium and get 25,000 public data from UIUC alumni in LinkedIn; [https://github.com/nlyu/Projects_Scrapy]
- Analyzed the data with python Panda library, made a research poster displaying ranking, race, demographic, gender, job title etc;
- Got **nominated the best research project** of the year in 2017 UIUC Undergraduate Research Symposium.

Urban Environment Equity, ACE UIUC **01/2015-05/2015**
- Investigated the effect of Milwaukee water clean-up program leading by Professor Bethany Cutts;
- Paper(Co-author): "Issues, Stakeholders, and Equity in Milwaukee's Urban River Management".

PROJECTS

Kaggle New York Taxi Duration Prediction Challenge **11/2018-12/2018**
- Individual data science project on "2016 NYC dmv public dataset" to predict taxi ride duration.
- Applied data cleaning, visualization, encoding by Python Pandas and generate feature extraction and model training. Achieve rank **34/882** in the Kaggle Challenge. [https://www.kaggle.com/c/ds100-fa18-proj2/leaderboard]

Lyulyulyu.com & PetTinder & LyuBlog System (Node.Js, ReactJs, Ruby on Rail) **09/2017-07/2018**
- A whole frontend ReactJs personal website with zero backend and no database by using Github issue page. [https://github.com/nlyu/Project_mywebsite_2.0]
- PetTinder is a Web App that applies mongoDB, ReactJs, Semantic UI, Restful Api and clones behaviors of Tinder.
- A Ruby on Rail full stack project includes user authentication, CRUD operation, data operation and interface design. [http://lyulyulyu.herokuapp.com]

Red-pill OS, Computer System **10/2016-12/2016**
- Built a Linux-like computer system featuring terminals, context switch, system calls, paging, file system, scheduler and Interrupt.
- System written in C and X86 Assembly working in a team of four people, cooperating and managing version on Github.

Tic-Tac-Toe Gamebox, Senior Design **09/2017-12/2017**
- Hardware game box included PCB design, soldering, Arduino coding, LED module and A/D converter. [https://www.youtube.com/watch?v=wgUVtvCcLg8]

TECHNICAL SKILLS

- System & Data Structure & Hardware: C++, C, JAVA, X86, FPGA, Verilog
- Web Development: Ruby on Rails, ReactJS, NodeJs, Restful, SQL, HTML, CSS, JQuery, Javascript
- Research & Data Science & AI and Machine Learning: Python, Python Notebook, Pandas, Sklearn, Tensorflow, Matlab
- Distributed System & Big Data: Scala, Spark