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EDUCATION

PhD student | *Imaging Science* — Aug. 2022 – Expected May 2026
Washington University in St. Louis — St. Louis, MO, U.S.A

Research Assistant — Aug. 2021 – Aug 2022
Washington University in St. Louis — St. Louis, MO, U.S.A
Advisor: Prof. Ulugbek Kamilov, Prof. Monica Shokeen

Master of Science | *Computer Science* — Aug. 2019 – May 2021
Washington University in St. Louis — St. Louis, MO, U.S.A
Overall GPA: 3.98/4.0

Bachelor of Economics | *Financial Statistics and Risk Management* — Sep. 2015 – Jul 2019
Southwestern University of Finance and Economics — Sichuan, P.R.China
Overall GPA: 87/100

AWARDS

WUSTL Dean's Select Fellowship — 2021
Washington University in St. Louis — St. Louis, MO, U.S.A

CONFERENCES AND PRESENTATIONS

Segmentation and Classification of Bones of Mice Basing on Micro CT Data — Apr 2021
Imaging Sciences Pathway(ISP) Retreat

RESEARCHING PROJECTS

Quantitative pipeline on Micro PET-CT Data of Mice | *Python, Tensor Flow* — August 2021 - Ongoing
CIG, WUSTL.

- Description – A project seeking to set up a pipeline basing on Micro PET/CT data to evaluate the course of Multiple Myeloma, offering an efficient, constant quantitative tool in preclinical study that is free from bias introduced from manual labeling.

PROJECTS

Detection of Edge of Stones in an Image | *MATLAB, MATLAB App Designer* — June 2020 – July 2020
https://github.com/FloraSun9101/EdgeDetection

- Description – A MATLAB application provides an interface through which user could browse an example picture of stones, then the app achieves detecting the edge of stones in the image, label them and return a specific cut of selected stone along with its perimeter and area in pixels. This is implemented using traditional image processing algorithm such as Canny Edge Detection, Watershed algorithm along with Machine Learning algorithm K-Means

Search Engine over PDF Paper Collections | *Python* — June 2019 – June 2019
Course Project, SWUFE — Sichuan, P.R.China

- Description – A search engine based on more than 1000 PDF papers that support searching among titles, authors and full text. PDF is first converted into text using PDFMiner, then text split is implemented with the help of Regex and a library called Whoosh is used to help to build the search engine.

- Techs: Python, PDFMiner, Whoosh, Regex

Visualization of Evolution of Stack Overflow| *D3.js*   Dec 2020 – Jan 2021
Group Course Project, WUSTL: https://washuvis.github.io/stackoverflow/   St. Louis, MO
- Description – A website visualized the aggregated users and posts' data using D3.js to describe the Evolution of Stack Overflow. My work includes: collect all the post data of Stack Overflow, aggregate the data for visualization. Implement the force chart and the edge bundling chart for the tag part.
- Techs: Python, D3.js

RELATED COURSES

Undergraduate Courses   Sep 2015 – Jun 2019
Southwestern University of Finance and Economics   Sichuan, P.R.China
  – Applied Time Series Analysis
  – Stochastic Process
  – Econometrics
  – Information Theory
  – Game Theory Application
  – Mathematical Modeling and Experiments

Graduate Courses   Aug 2019 – Ongoing
Washington University in St. Louis   St. Louis, MO
  – Intro to Machine Learning
  – Machine Learning
  – Intro to visualization
  – Large-Scale Optimization for Data Science
  – Bayesian Optimization
  – Bayesian Method in Machine Learning

TEACHING EXPERIENCE

T.A. of Machine Learning   Spring 2021
Washington University in St. Louis   St. Louis, MO

T.A. of Database Management System   Spring 2021
Washington University in St. Louis   St. Louis, MO

T.A. of Intro to Machine Learning   Fall 2020, Spring 2020, Spring 2021
Washington University in St. Louis   St. Louis, MO

T.A. of Data Structure and Algorithm   Spring 2020
Washington University in St. Louis   St. Louis, MO

SKILLS

Languages: Mandarin (Native), English (TOEFL 102), Spanish (Beginner)
Programming: Python, MATLAB, Java, R, JavaScript(D3.js)
Database: SQL, MongoDB
Editor: Emacs, Eclipse, PyCharm, MATLAB
Document Creation: LaTex, Markdown