

## Mira Qiu

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### EDUCATION

**University of Illinois Urbana-Champaign**, Champaign, IL  
*MS Computer Science Major*, Dec 2020 | GPA 3.7/4.0

**Harbin Medical University**, Harbin, China  
*BS Pharmacy Major*, May 2008 | GPA 3.0/4.0

### NOTEWORTHY COURSES:

- Algorithms and Computing Theory
- Database Management Systems
- Parallel and Distributed Computing
- Mobile Web Content and Development
- Data Mining
- Data Visualization
- Cloud Computing
- Computer Visio

### TECHNICAL SKILLS

Experience in Product Management, Analytics / Statistics, and Software Engineering.

- Data Science: **R**, **Python** with NumPy and Pandas
- Programming Technologies: **Java**, **C++**, **SQL**, **MATLAB**, JavaScript, HTML/CSS

### PROJECTS

**System Programming: Unicast Routing Implement Shortest-Path Routing**, October 2018 [**AWS C / C++**]

I built virtual network adapters that established data packet transfer in network order or host order, AKA endianness. In this project, I was using link-state(LS) protocols to maintain a correct forwarding table, reacting to changes in the topology, and converging within 5 seconds of the most recent change. In this project, implement of threads, sockets, TCP/IP).[[https://github.com/Mira-Qiu/UIUC\\_CS498NetworkComputing\\_LSP\\_MP2](https://github.com/Mira-Qiu/UIUC_CS498NetworkComputing_LSP_MP2)]

**Android Application Social All-in-One**, December 2018 [Ironic, **HTML/CSS**]

Designed the mobile application which integrated Facebook, Reddit, Instagram feeds into one. It is easy to read trends and saves time to watch all the interesting news with the app. [<https://github.com/Mira-Qiu/fianl4Ionic4>]

**Narrative Visualization: NYC Jobs**, August 2019 [**HTML CSS / D3** package]

Explore New York City job market at all the steps of the slide chart shows for details analysis and focus on data storytelling. More details information on hover on the plots. Using the interactive slideshow structure to show the average highest and the lowest salary difference through recent 10-years.[<https://mira-qiu.github.io/>]

**Knee MRI Bone Segmentation Using U-net Model**, April 2019 [**MATLAB R2018b**] [**Python 3.6**]

Presented a model to support physicians and radiologists in automating or assist in finding anatomical structure and region of interest. In this project, I used a machine learning model to do segmentation on the tibia bone in a 3-dimensional knee MRI image. The model used is a U-net model, and the evaluation metric used is Dice similarity which is used to compute the accuracy of the segmented MRIs. The accuracy reached 91.98 % . I ranked at 1st place out of 11 teams in the class competition. [<https://github.com/Mira-Qiu/CS631TComputerVision-FinalProject>]

**OOP Design: Beta University Annual Fund DataBase**, April 2019

Built a database for Beta University's donations for its Annual Fund. Created the E-R and EE-R diagram which is to express donors, companies relationships and constraints. Implemented the design using Oracle and executed SQL statements to create all tables. I tested database correctness using SQL command for routine / non-routine requests. Converted the database to Object-Oriented database model using InterSystems Cache. [**SQL**]

### EXPERIENCE

**Product Manager Intern at Security System Depot Inc.**, New York, NY, 9/2018 - Present

I am in the team that is responsible for Product Lifecycle Management (PLM), which is a role dealing with the planning, forecasting, production, and marketing of a product at all stages. I led the effort to build a model that allows users to easily maximize sales revenues and market shares. My responsibilities include integrating research data, planning and managing the project, and writing out specs.

**Data Analyst at L2 Computer Inc.**, New York, NY, 10/2016 - 10/2017

Responsible for creating an internal dashboard tool, used to view sales matrices such as sales of products per week and the summary of buyer activities on the website.