## **JIANGQIN MA**

Richland, WA • (765) 237-7729 • jma416@gatech.edu

https://github.com/majiangqin

### **EDUCATION**

Georgia Institute of Technology— Atlanta, GA

Master of Science in Analytics

Columbia Basin College—Pasco, WA

Accounting One-Year Certificate

Wuhan University— Wuhan, China

Master in Engineering

Wuhan University— Wuhan, China

Bachelor in Engineering

January 2023 – Present 4.0 GPA

January 2020 - August 2022

3.96 GPA

September 2008– June 2010

September 2004– June 2008

### RELEVANT COURSE

- Computing for Data
- Introduction to Analytics Modeling
- Artificial Intelligence
- Data Structure and Database
- Computer Networks
- Digital Image Processing
- Deeping Learning
- Digital Information Analysis

- Data Analytics in Business
- Machine Learning1 Computational Data Analytics
- Machine Learning2 High Dimensional Data Analytics
- Data and Visual Analytics
- Object-Oriented Programming
- Deformation Monitoring and Data Processing
- **Deterministic Optimization**
- Technique of Virtual Reality

## SPECIFIC SKILLS

- Advanced in Word, Excel & PowerPoint
- Strong mathematics skills

- Skilled in Python, R, C, C++, MATLAB
- Skilled in Windows & Mac OS

## **COURSE PROJECTS**

## Georgia Institute of Technology— Atlanta, GA

May 2023 - August 2023

Diabetes Data Analysis project, Computational Data Analytics, *Professor Yao Xie* 

- Utilize patient medical history and demographic information to predict diabetes using machine learning algorithms. Explored relationships between demographic and medical traits and diabetes likelihood.
- Employ K-means and GMM for cluster identification, and evaluate model accuracy and speed. Assesses logistic regression's performance against KNN classification and tree-based models, such as decision tree, random forest, extra trees, and AdaBoost.

## Georgia Institute of Technology-Atlanta, GA

January 2023- May 2023

Modeling and Forecasting Hotel Booking Cancellations project, Data Analytics in Business, Professor Frederic Bien

- · Analyze datasets from two Portuguese hotels containing booking profiles, hotel details, and time-series data to predict hotel booking
- Employ logistic regression, SVM, KNN, and Holt-Winters models for forecasting cancellations.
- Utilize advanced variable selection methods including correlation analysis and feature selection to optimize model performance.

## Columbia Basin College—Pasco, WA

April 2022- June 2022

Statistics Project, Introduction to Statistics, Professor Ryan Orr

- Explore the correlation between GPA and average daily time on social media using a sample of 30 individuals. Create a scatterplot and regression line using Desmos and calculated the correlation coefficient. Demonstrate a weak correlation between the two variables; the regression line indicated 35% variability in GPA could be explained by social media time
- Utilize data from "Housing Cost Burden by Race" in the City of Seattle GIS Program 2006. Analyze the relationship between race and yearly income using statistical measures and graphical representations. Construct histograms, bar charts, and pie charts to visualize income distribution by race. Calculate key statistics including mean, standard deviation, and five-number summary to unveil data patterns. Provide 95% confidence interval for the proportion of Asian people (13.6% to 46.4%) and 90% confidence interval for yearly income (\$47,419.50 to \$81,742)

#### Columbia Basin College—Pasco, WA

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- Process the payrolls for the last quarter of the year and complete the last quarterly and annual tax reports and forms. Assume that the payroll records, tax reports, and deposits have been completed and filed for the first three quarters of this year
- Prepare payroll registers. Maintain employees' earnings records. Journalize and post payroll and payroll tax entries. Complete federal, state, and city tax deposit forms and journalize the transactions
- Prepare various quarter-end and year-end payroll tax forms, including Form 941, Employer's Quarterly Federal Tax Return; *Form 940*, Employer's Federal Unemployment (FUTA) Tax Return Form; W-2, Wage and Tax Statement; Form REV-1667, Form UC-2, Employer's Report for Unemployment Compensation—Fourth Quarter; W-2 Transmittal; Form REV-1667, W-2 Transmittal; Form 1096, Annual Summary and Transmittal of U.S. Information Returns
- Make the adjusting entry as of December 31 to record the salaries and wages that have accrued but remain unpaid as of the end of the year. Also, prepare the adjusting entry as of December 31 to record the accrued vacation pay as of the end of the year

### Columbia Basin College—Pasco, WA

January 2022 – February 2022

Dog House Project, Introduction to Project Management, Professor Thomas Williams

- Develop a scope statement and a WBS for the project down to level 3 at minimum, down to a work package-level
- Build a schedule for the project scope and WBS, ensure the schedule has all the estimated activities and durations, logically sequenced, milestones defined, with a minimum of 30 activities in the schedule, and specify the critical path for the activity
- Build a cost estimate of the project for each activity. The cost estimate is uploaded in Excel. It shows the total cost for each activity and the total cost of the project
- Create a Project Risk Assessment Matrix. Analysis of project risks and identification of measures to mitigate the project risks. Create a risk assessment matrix for the actual result
- Create a Request for Proposal (RFP) for a dog kennel capable of housing ten dogs. Assuming we are looking for one vendor who will provide the shelter, bedding, fencing, food, and anything else needed

### Columbia Basin College—Pasco, WA

September 2021 – December 2021

Personal Finance Analysis Project, Personal Finance, Professor Carol Wysocki

- Use Excel to prepare a personal monthly household budget that includes cash surplus or deficit, savings ratio, and debt service ratio
- Analyze housing options and compare mortgage costs based on multiple factors such as interest rates, down payment, and PMI
- · Create a cost analysis of owning and operating a vehicle, including maintenance and insurance

### Wuhan University — Wuhan, China

September 2008- October 2009

Distribution of Map Digitization Errors project, *Professor Fang Xu* 

- Apply Normal distribution and P-Norm distribution in quantifying map digitization errors and develop MATLAB functions to calculate map digitization errors
- Assume errors that obey P-Norm distribution or Normal distribution and compare the fitting results between these two error distributions. Through the comparison, I find that errors do not follow the Normal distribution fitting curve but follow the P-Norm distribution fitting curve with the fitted P-value between 1.0 to 2.0

### WORK EXPERIENCE

#### New York Life—Richland, WA

May 2022 – December 2022

Insurance Agent

- Work with the clients to find the best plan for protecting their business
- Help the clients understand different products and make decision

### Shanghai HuaCe Navigation Technology Ltd— Shanghai, China

June 2010 – May 2011

Document Engineer

- Write user manuals for GPS and GIS products
- Manage projects in the software test team, arrange the software test schedule from priorities, take minutes at meetings, record software test results, and be responsible for communication and coordination with other departments

### **AWARD & Certificate**

• Life and Disability Insurance Producer License

2022 - 2023

• President's Honor Roll

Summer 2022

• President's Honor Roll

Spring 2022

• Dean's Honor Roll

Winter 2022

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• President's Honor Roll

Fall 2021

• CBC Foundation Scholarship

2021-2022

• Hawk Career Readiness Program Certificate

December 2021

• Awarded an accomplishment that demonstrates personal and professional growth

April 2021-August 2022

• Leader of the primary activity in LDS church • Volunteer in Primary classroom in Orchard Elementary School

October 2021–June 2022

• Volunteer in Primary classroom in Orchard Elementary School

September 2018– June 2019

• Wuhan University Graduate Students Scholarship

2009

• Wuhan University National Scholarship

2005