

# Jialin Zhang

Email: [Jialinzhang0@163.com](mailto:Jialinzhang0@163.com) Phone: +86-15686136859

## EDUCATION

Tufts University, MA, USA - M.S. in Bioengineering and Biomedical Engineering May 2019  
Northwest University ("Project 211" University of China), Xi'an, China - B.S. in Bioengineering Jun 2017

## RESEARCH EXPERIENCE

**Pulp Regeneration** Advisor: Prof. Hongjun Wang and Dr. Saul Weiner

Stevens Institute of Technology, NJ Sept 2019- Nov 2019

- Assisted my PI to make tooth slice samples, compared cell and nerve growth around various dental implants.
- By searching and reading plenty of relative paper, knew well about the hot point of this area.

**Comparative Study of Two Kinds of Hydrogels** Advisor: Prof. Chenhui Zhu

Northwest University, Xi'an Oct 2016- May 2017

- Designed experiment, prepared sample hydrogels with different ratio of chitosan, Tween-80, and Human-Like Collagen by lyophilization.
- Tested hydrogels' properties, including pH, swelling ratio, porosity, malleability and biocompatibility.
- Analyzed the data and discussed with my advisor to promote an optimum proposal.

## PROJECTS

**Lean Six Sigma Project Design, Team Leader**

Jan 2019- April 2019

- Successfully conducted the 'real world' Lean Six Sigma Project on restaurant business to identify and minimize the operational inefficiency with a result of 40%-decrease of the process waste.
- Identified influence factors (delivery time and food quality) for delivery order in restaurant, analyzed the operational inefficiency and constructed a model using Minitab and Lean Six Sigma.

**Recommendation System Construction**

December 2018

- Analyzed the given dataset (users' age and gender, movie ratings by users and release year), found the vector representations by SVD decomposition and ran collaborative filtering to make recommendations.
- The result is input the users' information auto output recommended movies.

**Model Implementation of Cholesterol Biosynthesis**

Oct 2017- Dec 2017

- Understood the negative feedback of cholesterol regulation and reconstructed the models.
- Created and implemented a new mathematic model of the effects that the initial conditions of HMGCR, Cholesterol, and mRNA to biosynthesis of cholesterol.

**Process Design of Recombinant Protein Preparation (lyophilized powder), Team leader**

Nov 2016- Jan 2017

(Including: material balance calculation, equipment selection, completion drawings of technical processes with control points, equipment and pipeline layout)

- Design and prepare the piping layout and make schedules for the whole design process.
- Assign different tasks to different group members and help them well finish their design work.

**Autonomous Trans & Service Platform for College, Northwest University**

May 2014- Sep 2016

- Created online platform, WeChat Official Account and App that featured many practical functions.
- Advertised our platform, like poster, flyer, and broadcast, finally have more than 500 followers.
- Managed my group, ensuring the group in an ordinary operation status.

## Key Lab EXPERIENCE

### Microbiology Experiment, Group Leader

Oct 2015- Dec 2015

(Including: familiarizations of the concept and the technique of sterility, separation & purification of microbes, film making and staining of bacteria (spores, capsules and flagella), actinomycetes, saccharomycete and moulds, determination of microbe size, preparation, disinfection and sterilization of culture medium and yogurt making, etc.)

- Designed & verified the experiment process, analyzed the results and finished the experiment report.
- Deepened understanding on the related theories and mastered the operation skills of microbiology.
- Won the award of “Model Group” with high-standard operation process and best experiment results.

### Biochemistry Experiment, Participant

April 2015- May 2015

(Including: color reaction & reduction reaction of saccharide, determination of saccharide content via 3,5-dinitrosalicylic acid colorimetry, color reaction & precipitation reaction of protein, determination of amino nitrogen by formol titration, determination of protein concentration by biuret method, separation of serum protein by cellulose acetate membrane electrophoresis and paper chromatography of amino acid)

- Learnt to determine saccharide by Mosenthal’s test and determine pentose by Tollen’s test, etc.
- Studied how to identify protein as well as saccharide through its reduction reaction test
- Better understood on the principle of amino acid paper chromatography, learnt to use spectrophotometer and mastered skills of cellulose acetate membrane electrophoresis and colorimetry.

## WORK EXPERIENCE

### Drug Safety Specialist, Pfizer, *Shanghai*

Oct 2020- Now

- Responsible for capturing single adverse event reports associated with client products on the client’s drug safety database, in accordance with international and local regulatory requirements.

### Technical Support, Creative Biogene, *NY*

Dec 2019- Feb 2020

- Communicated with customers about company’s product and technical solutions. Responsible for the pre- and post-sale technical issues, ensuring the smooth implementation of the project.
- Daily, weekly and monthly report.

### Marketing Data Analyst (Intern), Sealand Securities Co., Ltd, *Shanghai*

July 2018- Sept 2018

- Analyzed marketing information and compared pharmaceutical companies.
- Reported meeting minutes and translated biomedical papers.

## SKILLS

Lab Skills: Mass Spectrometry, Chromatography, Organic Synthesis, PCR, Gel Electrophoresis.

Software and programming languages: Minitab, MATLAB, MS office, Auto-CAD, R.

## AWARDS & HONORS

First Prize in Uniform Design Competition of School of Chemical Engineering of NWU

April 2015

2<sup>nd</sup>-class (twice) and 3<sup>rd</sup>-class (Once) Scholarships for Academic Excellence, awarded by NWU 2014, 2015 and 2016

## ACTIVITIES

Delivered speech in the celebration of Dragon Boat Festival in Harvard University

June 2018

Volunteer to organize the donation event for children in need in Medford

Nov 2017

Initiated and arranged a 3-people group to complete a program: Status Survey of Private Nursing Homes in Western China

Sept 2014-Dec 2015