



## CONTACT ME AT

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 <https://www.linkedin.com/in/ru-he-2aaba2194/>

## SKILLS & KNOWLEDGE

- python
- data analysis
- Machine Learning
- analytical chemistry
- cloud & high performance computing
- SQL, R & Fortran

# RU HE

## PROFILE

Ru He is a master's student at the University of Helsinki, studying data science and computational materials. Previously, she worked as an R&D engineer for 3 years, having experience in project management. Now she focused on data analysis, especially R&D data.

## WORK EXPERIENCE

### Analysis Engineer

Yangtze River Pharmaceutical Group, China | Jan 2018 -Aug 2018

- Develop and validate HPLC-MS/GPC-MS method;
- Analysis of pharmaceutical ingredients ;
- Ensure MS laboratory meets GMP requirements;
- Train team members about MS ;

### Research and Development (R&D) Engineer

AAC Technologies Holdings Inc., China | Jun 2014 - Des 2016

- Conduct failure analysis;
- Establish project databases;
- Responsible for products composition analysis projects;
- Create test SOP(Standard Operating Procedures);
- Work closely with product and supplier teams;

## EDUCATION

### Master of Theoretical and Computational Methods

University of Helsinki, Finland | Sep 2020 - present

- **GPA: 3.92**

main courses:

- Tools of high-performance computing;
- Data analysis with python;
- Advanced Machine Learning;
- Introduction to data science;
- Numerical Methods in Scientific Computing;
- Basics of Monte Carlo Simulations;

projects:

- Predict NHL hockey teams' playoff chance
- Predict atmospheric particle formation by Random Forest

## Master of Engineering in Material Physics and Chemistry

Chinese Academy of Sciences, China | Sep 2011 - Jun 2014

Finish a research project about molecular spectroscopy;  
Wrote a publication and a patent.

## Bachelor of material engineering

Soochow University, Soochow, China | Sep 2007 - Jun 2011

- **GPA:** 4.35/5 (Top 1%)

studied in mathematics, physics and material science

## Bachelor of International Economics and Trade

Soochow University, Soochow, China | Sep 2007 - Jun 2011

studied in international business

## EXPERTISE

- Good communication skills
- Team player
- Software: R markdown, Google Colab, Jupyter, tableau, LaTeX, Analytical Instruments Software, etc
- Skillful in Python(NumPy, pandas, scikit-learn, TensorFlow )
- Knowledge of machine learning
- Familiar with R, Fortran, and SQL
- Experienced in project management

## SCIENTIFIC PUBLICATIONS AND ACHIEVEMENTS

### Publications:

- **Ru He**, Yuchuan Cheng, Ting Jin, Meng Jiang, Chao Chen, and Gaojie Xu. Plasmonic Core/Satellite Heterostructure with Hierarchical Nanogaps for Raman Spectroscopy Enhanced by Shell-Isolated Nanoparticles. Adv. Optical Mater. 2014, 2, 788–793
- Ting Jin, Yuchuan Cheng, **Ru He**, Yuxia Luo, Meng Jiang, Chao Chen, and Gaojie Xu. Electric-field-induced structure and optical properties of electrorheological fluids with attapulgite nanorods. Smart Mater. Struct. 2014, 23, 075005

### Patents:

- Gaojie Xu, **Ru He**, Yuchuan Cheng, Ting Jin, Yuxia Luo. The synthesis method and usage of composite particles for Raman spectroscopy. No. 201410006165.X