

Qiyuan Chen

+86- 15821113561 | chenqiyuan2024sh@163.com

Personal page: <https://cinnnna.github.io>

EDUCATION BACKGROUND

University of Waterloo

2016/09–2021/05

Waterloo, Canada

Major: Mathematical Physics

Minor: Biophysics

Degree: Bachelor of Science

Cumulative GPA: 71.62%

Faculty Average: 75.61%

Core Modules: *Genetics; Discrete Models; Medical Physics; Biophysics; Biophysics of Therapeutic Methods; Applied Mathematics; Quantum Mechanics; Statistical Mechanics; Electrodynamics; Classical Mechanics; Computer Science; Computational Physics*

Coursera Module: Introduction to Biology of Cancer, provided by Johns Hopkins University

St. Ignatius of Loyola Catholic Secondary School

2015/02–2016/06

Oakville, Canada

RESEARCH EXPERIENCE

Research Assistant, An Exploratory Study of Design Patterns for Artificial Intelligence Systems in a Bioinformatics Context

2023/08–Present

Shanghai, China

- Developed an extensive benchmark for large language models in the field of bioinformatics, involving the collection of relevant data, performance analysis of diverse large language models, and the proposal of an innovative evaluation framework tailored to practical applications.
- Gained deep insights into the nuances and specificities of bioinformatics, delving into the evolving roles played by AI within the discipline by conducting comprehensive literature reviews.
- Identified shortcomings within AI systems, including issues like hallucination and unreliability in generative AI. Recognized the need for external bioinformatics repositories to rectify these limitations, exemplified in areas like biomechanical manufacturing for accurate information correction.

PUBLICATIONS

- [BioRxiv] **Qiyuan Chen**, Cheng Deng, "Bioinfo-Bench: A Simple Benchmark Framework for LLM Bioinformatics Skills Evaluation". DOI: [10.1101/2023.10.18.563023](https://doi.org/10.1101/2023.10.18.563023)
- [WSDM] Cheng Deng, Tianhang Zhang, Zhongmou He, Yi Xu, **Qiyuan Chen**, Yuanyuan Shi, Luoyi Fu, Weinan Zhang, Xinbing Wang, Chenghu Zhou, Zhouhan Lin and Junxian He, "Learning A Foundation Language Model for Geoscience Knowledge Understanding and Utilization". DOI: [10.48550/arXiv.2306.05064](https://doi.org/10.48550/arXiv.2306.05064) (accepted by WSDM2024)

EMPLOYMENT

Business Manager, Shanghai MediTrust Healthcare

2022/03–2023/04

Shanghai, China

- Served more than 20 pharmaceutical companies and biotechnology companies, providing them with commercial insurance, pharmacy benefit management (PBM), patient management, cloud pharmacy and other services based on product and disease characteristics to match their product strategy direction.
- Customised commercial insurance for the first CAR-T cell immunotherapy product in China by JW Therapeutics through developing an interest-free financial instalment, drug benefits and efficacy guarantee programme, which totalled RMB 30 million, reduced payment pressure for 200 diffuse large B-cell lymphoma patients, and improved confidence in both patients and doctors regarding CAR-T therapeutic method.
- Provided daily maintenance solutions for the commercial insurance of CSTONE Pharmaceuticals' three First-In-Class drugs target specific genetic mutations, Ayvakit®, Gavreto® and Tibsovo®, serving a total of approximately 1,000 patients with GIST, NSCLC, and acute myeloid leukemia. The total revenue amount reached RMB 6 million.
- Conducted pre-launch commercial insurance and patient management planning for CGE Healthcare's Human Coagulation Factor IX product, responsible for the long-term benefit plan cooperation with CGE Healthcare for haemophilia B patients.
- Designed and executed financial payment solution for CGeneTech's first multiple sclerosis generic drug in China, Teriflunomide Tablets and was responsible for the commercial negotiation to introduce Teriflunomide Tablets into online pharmacies, with a total package of RMB 12 million, benefiting 1,000 patients and relieving financial burden for those with rare diseases.
- Designed the patient referral program for Overland ADCT's ADC product, loncastuximab tesirine, which was launched in Hainan Boao Ruijin Hospital, with over 20 potential patients and 4 doctors willing to prescribe.

Consulting Analyst, Pharmcube

2021/08–2022/01

Shanghai, China

- Served on eight projects for MNC and large local pharmaceutical companies, including insulin product project evaluation and pipeline planning, clinical trial operation research, competitive intelligence of ophthalmology and pipeline planning, cellular therapy China market research, and membrane nephropathy clinical treatment status research.
- Conducted desk research such as literature review, clinical trial disclosure data analysis, secondary information collection in pharmaceutical forums, clinical research report analysis, annual report analysis, pharmaceutical policy reviews, and prospectus analysis.
- Proficiency in using the Informa and Pharmcube databases to analyse and visualise data during trials and competition in various disease areas.
- Designed and hosted expert interviews with physicians, project managers, researchers, etc, gained insights in various angles regarding healthcare industry.

INTERNSHIP

Medical Information Communication Specialist Intern, Bayer China

2021/03–2021/05

Shanghai, China

- Responsible for the sales of the oncology product, Sorafenib, in the Department of Pancreatic and Hepatobiliary Surgery at Fudan University Shanghai Cancer Center.
- Demonstrated the product information to the healthcare professionals accurately by reviewing clinical guidelines and relevant literatures to understand the current liver cancer treatment paradigm.

Strategy Consultant Intern, EY-PARTHENON

2020/10–2020/12

Shanghai, China

- Provided research services for a pharmaceutical MNC for a license-in target screening project in the field of central nervous system.
- Conducted a comprehensive comparison of the advantages and disadvantages of various drugs within the context of patient flow. This analysis was informed by a thorough review of clinical trial literature, treatment guidelines, news reports, pharmaceutical forums, and interviews with experts.
- Collection of information on the core business of the major CNS drug manufacturers and development routes of various pharmaceutical products imported from abroad to China over the past twenty years.

Junior Salesforce Administrator, Ramsoft Inc.

2019/01–2019/04

Toronto, Canada

- Responsible for debugging flows, managing product catalogues, editing CPQs, testing and installing apps, etc.
- Independently designed new business intelligence dashboards for five departments to visualise sales data and user experience.

IT Intern, Zayo Group LLC-Allstream

2018/09–2018/12

Toronto, Canada

- Responsible for workflow design, cleaning up data and conducting user experience testing within the company, etc.
- Independently completed a Sarbanes-Oxley internal audit of all company employees in nine days using Excel, SQL and Python.

VOLUNTEER

Head of the Marketing Department, International Children's Medical Relief Foundation

2019/09–2021/06

Waterloo, Canada

- Responsible for planning and organising events that a cumulative total of over 320 students attended.
- Participated in a social media campaign and raised \$3200 CAD.

LANGUAGE & SKILL

- Mandarin: Native; English: Fluent
- Microsoft Certified: Power BI Data Analyst Associate
- Proficiency in Python, Power BI, MySQL, R, and Salesforce
- GRE: Overall: 323, Verbal Reasoning: 153, Quantitative Reasoning: 166, Analytical Writing: 4.0