# Rongxin **Zhang**

Ph.D. candidate · BIOINFORMATICS

#### Profile

**Hometown** Nantong City, Jiangsu Province, China

State Key Laboratory of Bioelectronics,

School of Biological Science and Medical Engineering,

**Laboratory** Southeast University

Birth 1995.10.24
Gender Male

Working Mail rongxinzhang@outlook.com (For Global)

Personal Website https://rongxinzhang.top

#### Education

#### Ph.D. Candidate of Engineering (Supervisor: Prof. Xiao Sun)

2018-now

Department of Bioinformatics and System Biology

State Key Laboratory of Bioelectronics

School of Biological Science and Medical Engineering

Southeast University

#### **Bachelor of Science (Supervisor: Prof. Qianghu Wang)**

2014-2018

**Department of Bioinformatics** 

School of Biomedical Engineering and Informatics

School of Basic Medical Sciences Nanjing Medical University

#### Skills

Programming; R, Python, PHP et al.

Software and website developing

Working in Linux environment

Proficiency in using common bioinformatics software or databases

Data mining and statistical analysis

Sequencing data analysis; RNA-seq, ChIP-seq, DNase-seq et al.

Have a background in biology and medicine

Academic paper writing

Good communication skills

# Research Interests

Human Epigenetics & Disease (Cancer)

Non-canonical Nucleic Acid Secondary Structures, especially G-quadruplexes

Bioinformatics Software & Database Development

Machine Learning Tasks in Bioinformatics or Medical Informatics

Sequencing Data Analysis

# Research Experience \_\_\_\_

Designed and built two Bioinformatics databases, iCAN and Mir2Drug.

Participated in a study to assess the risk of development of type 2 diabetes in the Chinese urban population by using machine learning approaches.

Identified Glioblastoma Multiforme samples from scRNA sequencing data.

Analyzed the potential role of G-quadruplexes in the SARS-CoV-2 genome, the human 3D genome, and the human transcriptome.

## Awards

Excellent Academic Poster (The 9th Jiangsu Provincial Bioinformatics Academic Conference)		2019
Outstanding Graduates of Nanjing Medical University		2018
The Contest of LAN QIAO CUP (JAVA Programming Language Competition)	Third Prize	2017
China College Students Computer Design Competition (Software Development and Application)	Second Prize	2017
Innovation Cup of Computer Design Competition	Second Prize	2016
Triple-A Students of Nanjing Medical University		2015

### **Publications**

Whole genome identification of potential G-quadruplexes and analysis of the G-quadruplex binding domain for SARS-CoV-2 (PDF)

Rongxin Zhang, Ke Xiao, Yu Gu, Hongde Liu, Xiao Sun Frontiers in genetics

Enhancer IncRNAs influence chromatin interactions in different ways (PDF) 2019

2020

Hou Yue, *Rongxin Zhang*, Xiao Sun

Frontiers in genetics
Integrative characterization of G-Quadruplexes in the three-dimensional

chromatin structure (PDF) 2019

Hou Yue, Fuyu Li, *Rongxin Zhang*, Sheng Li, Hongde Liu, Zhaohui S. Qin, Xiao Sun *Epigenetics* 

Machine Learning Models in Type 2 Diabetes Risk Prediction: Results from a Crosssectional Retrospective Study in Chinese Adults (PDF)

2019

Xiong Xiaolu, *Rongxin Zhang (Co-first author)*, Yan Bi, Weihong Zhou, Yun Yu,

Dalong Zhu Current medical science

Institute collection and analysis of Nanobodies (iCAN): a comprehensive database

and analysis platform for nanobodies (PDF)

Zuo Jing, Jian Li, *Rongxin Zhang* et al.

An Integrating Approach for Genome-Wide Screening of MicroRNA Polymorphisms

Mediated Drug Response Alterations (PDF) 2017

Wang Xianyue, Hong Jiang, Wei Wu, *Rongxin Zhang* et al. *International journal of genomics*