

Guangyu Shan

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RESEARCH INTERESTS	I am interested in bioinformatics algorithm development. Previously, I also worked on text mining and IVD product development.	
EDUCATION	<i>Master of Science</i> , Bioinformatics Academy of Military Medical Sciences , Beijing, China GPA: 79.0/100 Dissertation: Data Mining and Feature Selection of High Dimensional Biomedical Data Based on TCGA and PubMed Databases Advisor: Prof. Chenggang Zhang	2013 - 2016
	<i>Bachelor of Engineering</i> , Bioengineering Wuhan Institute of Bioengineering , Wuhan, China GPA: 88.9/100 Dissertation: Preparation of Chitosan Degradation Enzymes from <i>Aspergillus oryzae</i> by Solid-state Fermentation	2009 - 2013
EXPERIENCE	<i>R&D Supervisor</i> R&D Department, Novogene Corporation, Beijing, China <ul style="list-style-type: none">Responsible for the development, deployment, and maintenance of bioinformatics pipelines, focusing on improving robustness and accuracy, such as MSI, TMB, BRCA1/2 variants auto-interpretation pipelines, etc.Manage project workflow of sample processing and data transfer, in collaboration with project managers and data engineers.Work with interdisciplinary team to prototype and implement functional and design specifications for IVDs.	Jul 2016 - Present
COMPUTER SKILLS	<i>Basic:</i> Python = R > Shell > Scala, Linux/Mac OS X = Vim = Docker > LaTeX > Git, MySQL > MongoDB	
	<i>Advanced:</i> Cancer Genomics, Machine Learning, Text Mining, NGS algorithm development	
HONORS & AWARDS	<i>Distinguished Alumni Award</i> Wuhan Bioengineering Institute, Wuhan, China	2017
	<i>Outstanding Student</i> Institute of Radiation Medicine, AMMS, Beijing, China	2014
	<i>Rank 7th in Men's 1500-metre Race in the Sports Meeting</i> Wuhan Bioengineering Institute, Wuhan, China	2011
	<i>National Encouragement Scholarship</i> Ministry of Education, Wuhan, China	2010

- PUBLICATIONS**
1. **Guangyu Shan**, Lin Zhao, Lei Li, et al. [Comparison of Tumor Mutational Burden \(TMB\) derived from whole exome and large panel sequencing in lung cancer](#) [C]. 2017, IASLC 18th World Conference on Lung Cancer (IASLC WCLC 2017), Yokohama, Japan.
 2. **Guangyu Shan**, Lin Zhao, Lei Li, et al. A target sequencing-based method for detecting microsatellite instability [C]. 2017, Chinese Society of Clinical Oncology (CSCO), Xiamen, China.
 3. **Guangyu Shan**, Yiming Lu, Wubin Qu, et al. [A customized literature service based on WeChat public platform](#) [J]. Chinese Journal of Bioinformatics, 2015, 13(2): 120-124. [In chinese]
 4. **Guangyu Shan**, Yiming Lu, Wubin Qu, et al. [Topological characteristics of postoperative survival rate-related molecules in hepatocellular carcinoma-associated complex networks](#) [J]. Military Medical Sciences, 2015, 39(9): 691-693. [In chinese]
 5. **Guangyu Shan**, Yiming Lu, Bo Min, et al. [A MeSH-based text mining method for identifying novel prebiotics](#) [J]. Medicine, 2016, 95(49): e5585.
 6. Yiming Lu, **Guangyu Shan**, Jiguo Xue, et al. [Defining the multivalent functions of CTCF from chromatin state and three-dimensional chromatin interactions](#) [J]. Nucleic Acids Research, 2016, 44(13): 6200-6212.
 7. Yiming Lu, Wubin Qu, **Guangyu Shan**, et al. [DELTA: A Distal Enhancer Locating Tool Based on AdaBoost Algorithm and Shape Features of Chromatin Modifications](#) [J]. PloS one, 2015, 10(6): e0130622.
- PATENT**
1. **Guangyu Shan**, Xia Ran, Yan Wang, et al. [A NGS-based software for detecting MSI in colorectal cancer](#). ID: CN107058551A; Date: 20170818.
- SOFTWARE COPYRIGHT**
1. **Guangyu Shan**. [A NGS-based software for detecting MSI in colorectal cancer \[NovoMSI\] V1.0](#). Beijing Novogene Technology Co. Ltd. Registration ID: 2017SR206733; Registration Date: 20170525.
 2. **Guangyu Shan**. [A customized literature service system based on WeChat public platform \[PCRMaster\] V1.0](#). Institute of Radiation Medicine. Registration ID: 2016SR177461; Registration Date: 20160712.