Shuyang XU

I have 4 years work experience as **Bioinformatics Engineer** (Analysis & Development), and help develope **scRNA-seq (Single Cell Sequence)** and **Iso-Seq (Full Length Transcriptome)** pipelines, on which he now is focusing, from beginning.

Tel : +86-13570430529

Email : xsyxushuyang@gmail.com

GitHub : https://github.com/ShuyangXu

EDUCATION

- 2011.09 - 2016.06, **Sun Yat-sen University**

    - 2015.09 - 2016.06, B.S. in **Information and Scientific Computation**, *School of Mathematics*

        - *Thesis : Modelling and Simulating Transcription Stochasticity of Eukaryotic Cells*

    - 2011.09 - 2015.06, B.S. in **Biotechnology**, *School of Life Science*

        - *Thesis : Functional Characterization of Monoclonal Antibody M3-85 against Trypanosoma brucei Cytoskeleton*

WORK EXPERIENCE

- 2016.06 - now , **Bioinformatics Engineer**, *Guangzhou Genedenovo Biotechnology Co., Ltd*

    - 2018.12 - now, *member of Development Group*

    Develope and maintain new pipelines : sc-VDJ, sc-ATAC, m6A MeRIP, Visium Spatial, scRNA-seq online tools, etc. Deal with some customized and/or intricate projects, for example, a COVID-19 VDJ project.

    - 2017.10 - 2018.12, *leader of Analysis Group*

    Lead a 4 member analysis group, and mentor 2 new members. Produce analysis results based on requires. Develope and maintain new pipelines : Iso-Seq, scRNA-seq, Cell-Trajectory, ceRNA, etc.

    - 2016.06 - 2017.10, *member of Analysis Group*

    Produce analysis results based on requires. Develope and maintain new pipelines : Prokaryotic RNAseq, GSEA, etc.

SKILLS

- Working Languages ： Perl、R
- Technic Environments ： Linux、R (RStudio)
- Others : HTML、Markdown、git

PROJECT EXPERIENCE

RNAseq, LncRNA-seq, Denovo, smallRNA-seq, Iso-Seq, scRNA-seq, customized project

PIPELINE DEVELOPMENT

	pipeline	release date	maintain	major tech
	Prokaryotic RNAseq	2017.09	to 2018.08	Rockhopper
	Iso-Seq	2017.10	until now	smrtlink, CWL
	m6A RIP-seq	2019.09	until now	samtools, bedtools, macs2, RiboDiff
10x Single Cell related	scRNA-seq	2018.05	until now	Cellranger, Seurat
	Cell-Trajectory	2018.10	until now	monocle2
	sc-VDJ	2018.12	until now	Cellranger
	sc-ATACseq	2019.04	until now	Cellranger, Signac
	scRNA-seq online tools backend program	2019.12	until now	Seurat
	Visium spatial	2020.05	until now	Space Ranger, Seurat
Other tiny pipelines	ceRNA、GSEA、GSVA、SCIENIC ...			

HONORS IN WORK

- **Best Freshman** in 2016 (top 10%, *Guangzhou Genedenovo Biotechnology Co., Ltd*)
- **Best Employee** in 2017 (top 10%, *Guangzhou Genedenovo Biotechnology Co., Ltd*)
- **Best Employee** in 2018 (top 10%, *Guangzhou Genedenovo Biotechnology Co., Ltd*)

SOFTWARE COPYRIGHT

- *An interactive shell for Filter_FQ*, Filter_FQ的交互软件 (2017SR658807, copyright transfers to company)
- *A plot software for gene's GO annotation and classification*, 一种绘制基因GO注释及分类图像软件 (2017SR658094, copyright transfers to company)

SHARING / TUTORIAL

- ggplot_guts : https://shuyangxu.github.io/ggplot_guts/Chapter1.index.html （2020.07)
- An inner study group about Single Cell Sequence （organizer, 2018.06)
- Introduction of Data Structure （2017.11)