# **Rashid Al-Abri**

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#### **Stanford University**

B.Sc. in Computer Science • (4.0 GPA)

## **EXPERIENCE**

# Gürsoy Lab, New York Genome Center

**Bioinformatics Summer Intern** 

- Conducted and presented a literature review on repeat DNA genotyping algorithms to identify gaps in research and opportunities to improve the status quo
- Innovated a computational method to estimate the length of long repeat DNA from short-read sequencing data and implemented the tool in the Rust language to undergo testing and validation

# **Snyder Lab, Stanford Medicine**

Research Assistant

- Contributed significantly to the identification of >100 recurrent repeat expansions in cancer
- Engineered a novel normalization tool to accurately identify repeat DNA expansions from WGS data in over 4000 cancer genomes, improving the independent validation rate from 25% to 60%
- Benchmarked normalization tool using simulated data and presented results to PI & lab members
- Listed as a 2<sup>nd</sup> co-author in a *Nature* article (under review) titled "A genome-wide atlas of recurrent repeat expansions in human cancer"

### **Stanford Bio-X**

Undergraduate Fellow

- Supported the development of a novel polymorphic repeat DNA catalog by designing and deploying a cloud-based pipeline to identify polymorphic repeat loci in the 1000 Genomes dataset
- Collaborated with industry mentors at Illumina to sync research & development efforts

### **SKILLS & COURSEWORK**

- Proficient in using Unix systems, Git, HPC clusters, and standard bioinformatic tools for research
- Proficient in Bash and Python scripting languages for data analysis and visualization
- Comfortable with low-level systems programming using the C, C++ and Rust languages
- Experience writing reproducible analyses using Snakemake
- Fluent in English & Modern Standard Arabic
- Intensive coursework in Biology, Cloud Computing, Algorithms & Systems ٠

### **AWARDS**

**Takatuf International Scholarship** · \$600,000 **Bio-X Fellowship** · \$7,000 1st Place, Oman Arab Bank Innovation Hackathon · \$7,000 Sept 2017 – Jun 2023 Jun 2021 Apr 2021

# Jun 2021 – Aug 2021

June 2022 – Present

Expected June 2023

Aug 2020 – Present