1ST COLLOQUIUM ON BIOINFORMATICS, LEARNING AND TEACHING COBLET 2022, ISTANBUL

Online Introductory Bioinformatics Training for Microbiologists in Turkey

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Training

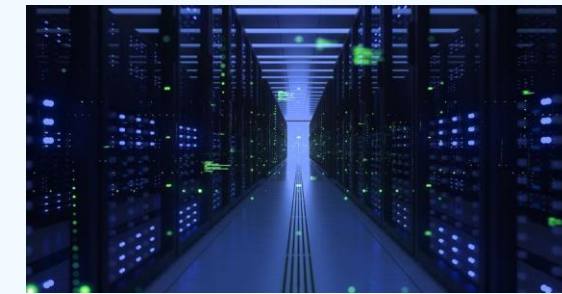Main Focal Point = Microbiologists

WHAT IS NEEDED FOR BIOINFORMATICS ANALYSES
for Microbiologists?

Computer Skills

Genomics

Data Analytics

Training Packages

Introduction to Microbial Bioinformatics

Introduction to Databases

Introduction to Command-line

Introduction to R and Python

Sequencing Technologies and Outputs

Quality Control

Assembly and Mapping

Annotation

Data Visualisation and FAIR Data Principles

Where can we find the training package?

https://cinnetcrash.github.io/

TRAINING

TRAINING

cinnetcrash / Biyoinformatik_TR (Public)

<> Code   ⊙ Issues   ⅄ Pull requests   ⊙ Actions   ⊞ Proje

ᵧ master   ⅄ 2 branches   🏷 0 tags
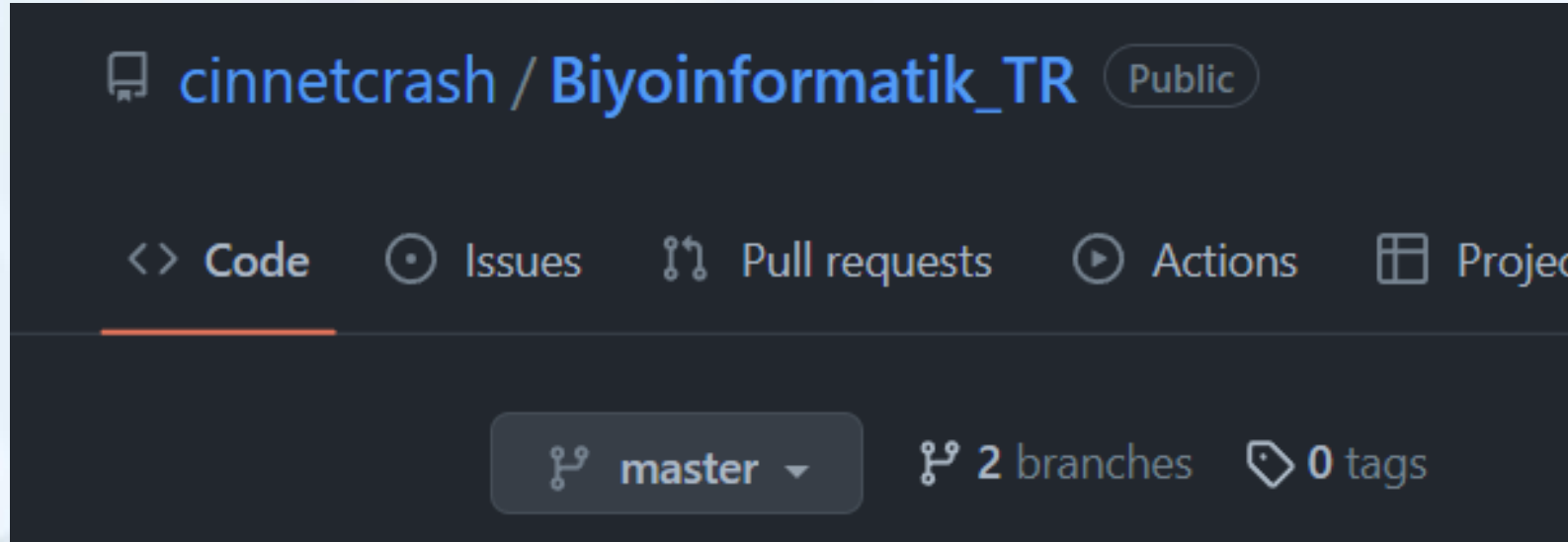
Bash Scripting ile Basit Otomasyon ve Sık Kullanılan Komutlar

Komut Satırı

Kabuk, bilgisayarınızı bir grafik kullanıcı arabirimi (GUI) aracılığıyla kontrol etmek için farenizi ve klavyenizi kullanmak yerine bir klavye ile kontrol etmenizi sağlayan bir komut satırı arabirim programıdır. İlk başta garip ve zor görünebilir, ancak kabukta ustalaşmanın birçok nedeni vardır.

- Çoğu biyoinformatik programı yalnızca komut satırından çalıştırılabilir. Dolayısıyla, genomik veya transkriptomik çalışmak istiyorsanız kabuğa aşina olmanız gerekecektir.

- Kabuk, işinizi daha verimli ve daha hızlı yapmanız için size güç verir. Bu, tekrarlanabilir bir araştırma programı geliştirmeye yönelik ilk adımdır.

- Bulut bilgisayarlarına yalnızca komut satırı arabirimleri üzerinden erişilebilir.

Challenges

This training package, prepared in line with the needs of these researchers who do not have a computer science background, will also be published on GitHub, a platform that can be easily followed and accessed at any time for those who want to work in this field. This free online program package includes training for these topics as follows;

Introduction to Microbiological Bioinformatics, Introduction to Databases, Introduction to Command-line, Introduction to R and Python, Sequencing Technologies and Outputs, Quality Control, Assembly/Mapping, Annotation, Data Visualization, interpretation, and FAIR principles.

CONCLUSIONS

It has been observed that the number of individuals/institutions that can use some end user-systems that can convert the data obtained from studies in the field of microbial bioinformatics into reliable, reproducible and analytical results in Turkey is insufficient and the number of those who want to conduct such research in the field of microbiology and training for those researchers should be increased.

All materials will be published in Turkish to make education more accessible, especially in Turkey (late this year).

References

1. Maria Victoria Schneider, James Watson, Teresa Attwood, Kristian Rother, Aidan Budd, Jennifer McDowall, Allegra Via, Pedro Fernandes, Tommy Nyronen, Thomas Blicher, Phil Jones, Marie-Claude Blatter, Javier De Las Rivas, David Phillip Judge, Wouter van der Gool, Cath Brooksbank, Bioinformatics training: a review of challenges, actions and support requirements, Briefings in Bioinformatics, Volume 11, Issue 6, November 2010, Pages 544–551
2. Hall CR, Griffin PC, Lonie AJ, Christiansen JH (2021) Application of a bioinformatics training delivery method for reaching dispersed and distant trainees. PLoS Comput Biol 17(3): e1008715

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