

# Mohamed Abuelanin

Computer Science PhD Student  
specializing in Bioinformatics

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🌐 mr-eyes.com

## SKILLS

C++ - Python - Rust - Bash - Linux - CI  
Docker - FullStack - Git

## VOLUNTEER EXPERIENCE

**Nile University's Data Center** (November 2017 - Present)  
System Admin

Built an HCP from scratch (H/W & S/W),  
firewall, network configuration, and  
VM accounts distributions.

**Egyptian Federation for Scouts** (June 2009 - September 2012)  
Scout Leader

Organized camps, trained scout  
troops, and led meetings.

## PUBLICATIONS

**Insilico Codon Bias Correction for Transgenic Biological Protein Sequences for Vaccine Production** (October 2020)  
ieeexplore

## REFERENCES

**C. Titus Brown**  
Principal Investigator  
Professor. Department of Population  
Health and Reproduction, School of  
Veterinary Medicine, University of  
California, Davis, CA, USA

✉ ctbrown@ucdavis.edu

**Tamer A. Mansour**  
Co PI

Assistant Researcher. Department of  
Population Health and Reproduction,  
School of Veterinary Medicine,  
University of California, Davis, CA, USA

✉ tahmed@ucdavis.edu

I am a 3rd-year Computer Science Ph.D. student at UC Davis and work as a Graduate Student Researcher at the Lab for Data-Intensive Biology (DIB-Lab). My research focuses on developing efficient software to transform, analyze, and use exponentially growing biological data.

## EDUCATION

**University of California, Davis** (September 2020 - Present)  
Ph.D., Computer Science

**Nile University** (March 2017 - February 2019)  
M.Sc., Computer Science

**Higher Technological Institute (HTI)** (September 2011 - January 2017)  
B.Sc., Biomedical Engineering

## WORK EXPERIENCE

**University of California, Davis** (September 2020 - Present)  
Graduate Student Researcher

Titus Brown's Lab (DIB-LAB) - Department of Population Health and Reproduction,  
School of Veterinary Medicine.

⇒ <http://ivory.idyll.org/lab/members.html>

**Nile University** (March 2019 - August 2020)  
Teaching Assistant

Grad-level courses: ML & statistical analysis - Advanced Big Data, Next Generation  
Sequencing.

**Nile University** (March 2017 - February 2019)  
Research Assistant  
Bioinformatics Research Group. CIS, Nile University, Giza, Egypt.

**Artronix** (January 2013 - February 2017)  
R&D Engineer  
Develop engineering solutions using embedded systems and Fullstack.

## PROJECTS

**kSpider**  
kSpider is a fast and efficient C++ CLI program that performs dataset clustering  
based on the kmer content.

⇒ <https://github.com/dib-lab/kSpider>

**kProcessor**  
kProcessor is a C++ API with a Python interface that enables easy handling of  
sequence k-mer content.

⇒ <https://github.com/dib-lab/kProcessor>

**De novo RNA-SEQ**  
Snakemake workflow to perform de novo transcriptome assembly, DGE, and  
annotation.

⇒ <https://github.com/mr-eyes/denovo-rnaseq>

**DB Retina**  
A computationally efficient pipeline for database integration in an overlap-based  
super network

⇒ <https://github.com/DBRetina/DBRetina>