

Enes Kemal Ergin

CONTACT INFORMATION

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North American University
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RESEARCH INTERESTS

Deep learning applications in genomics and epigenomics, cancer genomics, next-generation sequencing analysis, systems biology, machine learning applications

EDUCATION

North American University (NAU), Stafford, Texas USA
B.S., Computer Science, 2013 - 2017

RESEARCH EXPERIENCE

Visiting Researcher

Harvard Medical School

November, 2015 - September, 2016

- Research: Predicting the determinant of alternative splicing of RNA transcription
 - Worked with Lua/Torch, Python Pandas, Numpy, Matplotlib
 - Developed a deep learning model, convolutional neural network model using Torch7
- Research: Predicting transcription factor binding sites across cell types
 - Attended a ENCODE-DREAM competition: ([Link](#))
 - Worked with Linux terminal tools, Python (Tensorflow, Pandas, Numpy, Matplotlib)
 - Implemented a deep learning model, multi-task convolutional neural network model using Tensorflow

Undergraduate Research Assistant

North American University

September, 2015 - present

Lead student of Bioinformatics Lab at NAU. Closely followed 4 students and mentored them. Created open source bioinformatics curriculum with Open Source Society in GitHub.

Yeditepe University

August, 2014 - May, 2015

Worked remotely as an genomic data scientist and investigated data from NCBI PubMed database. Utilized virtual docking software to determine the best possible inhibitor for specific molecule.

Texas Institute of Education and Research (TIBER)

September, 2014 - April, 2015

Worked as an experimental biologist on sinusitis bacteria. Designed experiments by preparing agar solutions, and bacteria culture. Only worked on wet-lab experiments.

TEACHING EXPERIENCE

North American University, Stafford, TX USA

Teaching Assistant

September 2015 - Present

Co-taught 3 undergraduate level courses for computer science department. Prepared the lab sessions and extra sessions on Git/GitHub, Rapid Python Programming, and Ipython/Jupyter. Shared responsibility for lectures, exams, homework assignments, and grades.

- COMP 3317 Algorithms, Fall 2015, 2016.
- COMP 3320 Programming Languages, Fall 2016.
- COMP 3322 Software Engineering, Fall 2016.

Instructor

February - April 2015

Taught Basic Python programming to 35 people including students, faculty, and staff of NAU, which was a first ever course taught purely by a student in NAU history. ([Link](#))

PUBLICATIONS

Kocabas, F., **Ergin, E.K.** 2016. Identification of small molecule binding pocket for inhibition of Crimean-Congo hemorrhagic fever virus OTU protease. Turkish Journal of Biology, 40:239-249.

PROJECTS	<p>Open Source Bioinformatics Curriculum June 2016 4 year worth, open source source bioinformatics curriculum developed by my lab and contributed by open source society and other contributors around the world. (Link)</p> <p>Scholar Development Center February 2016 Created a non-profit community based organization under the Raindrop Foundation to help Turkish undergraduate students around Texas to achieve their dreams in academia or industry.</p> <p>Essential Algorithms September 2014 Put together a repository which contains algorithms from A Practical Approach to Computer Algorithms by Rod Stephens, Number Theory, and other useful algorithms written in Python. (Link)</p>																
HONORS AND AWARDS	<p>North American University: Exceptional Merit Scholarship, 2012-2017</p> <p>North American University: Graduated Magna Cum Laude, Honors in Computer Science, 2017</p> <p>North American University: President's Honor Roll , 2015-2017</p> <p>North American University: Outstanding Student of the Year, 2015</p>																
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TECHNICAL SKILLS	<ul style="list-style-type: none"> • Languages: Python(Pandas, Numpy, H5py, Tensorflow, Biopython, Scikit-learn), R, Java, L^AT_EX, C/C++, Shell/Bash Scripting, Javascript, HTML, CSS • Database Systems: SQL, MySQL, MongoDB • Operating Systems: Unix/Linux, MacOS, Windows. 																
REFERENCES	<ul style="list-style-type: none"> • Assistant Prof. Dr. Stirling L. Churchman, Genetics Department, Harvard Medical School, Boston, MA, USA, churchman@genetics.med.harvard.edu • Associate Prof. Dr. Kemal Aydin, Computer Science Department, North American University, Stafford, TX, USA, kemal@na.edu • Assistant Prof. Dr. Fatih Kocabas, Genetics and Bioengineering Department, Yeditepe University, Istanbul, Turkey fatih.kocabas@yeditepe.edu.tr • Prof. Dr. Reg Pecan, President, North American University, Stafford, TX, USA rpecan@gmail.com 																