Edmund A. **Miller**

COMPUTATIONAL BIOLOGIST · SOFTWARE DEVELOPER

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Education

University of Texas at Dallas
Richardson, Texas

M.S. IN BIOTECHNOLOGY   *Aug 2018 - May 2019*

- Academic Excellence Scholarship 2015-2019
- Fast-Track Program

University of Texas at Dallas
Richardson, Texas

B.S. IN MOLECULAR BIOLOGY   *Aug 2015 - Aug. 2018*

- Academic Excellence Scholarship 2015-2019
- President's Scholarship 2016-2017
- Continuing Student Scholarship 2017-2018

Skills

DevOps	Docker, GCloud, AWS, GitLab-CI, Kubernetes, Travis-CI, CircleCI
Front-end	React, Redux, Hugo, HTML5, CSS
Decentralized Technologies	IPFS, Whisper, Ethereum Virtual Machine, Hyperledger
Tools	Linux, Emacs, Vim, Git, Make, Snakemake, GitHub, GitLab
Programming	Python, Node.js, Lisp, Solidity, BASH/ZSH, R, C++, Rust, LaTeX

Experience

Olypsis Technologies Inc.
Dallas, Texas

SOFTWARE DEVELOPER   *May 2018 - PRESENT*

- Developed the DAWN protocol to transfer files in a peer to peer fashion, that is decentralized and does not rely on a 3rd party to be trusted.
- Built and deployed DAWN protocol using Whisper, IPFS, AES256, and React.
- Created Smart contracts in Solidity for BlockNKey Project to manage users key-pairs.
- Designed Hyperledger systems for supply chain applications.
- Lead for Saro Project to created smart contracts for users to create non-fungible tokens of their real estate and split the ownership of the property using fungible tokens.

Millblock LLC
Richardson, Texas

CO-FOUNDER   *Sep 2017 - PRESENT*

- Analyzed blockchain projects and their respective cryptocurrencies as investments.
- Hired and managed contractors to carry out various technical projects.

Undergraduate Research, Functional Genomics Lab(Prof. Tae Hoon Kim)
Richardson, Texas

RESEARCHER   *Jul 2015 - PRESENT*

- Created a data pipeline to reproduce and create new eRNA predictions using Snakemake, homer, Bowtie2, and BedTools.
- Designed PCR primers for cell identification, target transcripts, and genotyping.
- Genotyped, and organized the lab's various knock-out mice colonies.
- Dissected mice to retrieve frontal cortex and then cultured the neuronal cells.
- Performed RNA isolation from cells that were treated with LPS-particles and used qPCR to quantify eRNA transcript levels.

Paul G. Hull, MD
Plano, Texas

APPRENTICE   *May 2014 - Aug 2016*

- Learned general diagnostic techniques
- Sutured patients wounds after procedures.
- Administered various injectioins to the patients.
- Drew blood for routine blood tests.
- Learned to interpret EKGs

Extracurricular Activity

Dallas Blockchain
Richardson, Texas

CORE MEMBER
Jun 2017 - PRESENT

Artificial Intelligence Society
UT Dallas, Texas

MEMBER
Sep 2016 - PRESENT

Academic Excellence Scholarship
Richardson, Texas

FRESHMAN MENTOR
Aug 2016 - Dec 2016

GitHub
Richardson, Texas

CAMPUS EXPERT IN TRAINING
Aug 2018 - PRESENT

UT Dallas Rugby Football Club
Richardson, Texas

CAPTAIN
Aug 2015 - PRESENT

- 2015-2016 Rookie of the Year
- 2016-2018 President
- 2017-2018 Most Valuable Back
- Created & Maintained Club Website

Hackathons

ETHSF
San Francisco, California

LINK SET
Oct 2018

- First Place Set
- Second Place ChainLink

CometHacks
Richardson, Texas

ROTOHIVE
2018

- Second Place
- Created smart contracts for a fantasy sports dapp based on Numerai.

ETHDenver
Denver, Colorado

CRYPTO-ADVENTURES
Feb 2018

- A decentralized RPG text-based adventure using ERC-721 tokens as playable characters.

ETHMemphis
Memphis, Tennessee

ETH-TERM BETS
May 2018

- Create long term bets on the Ethereum.
- Future direction would be interesting to use ZKproofs to keep outside parties from seeing the participants bets.

Projects

Doom-Emacs
GitHub

CONTRIBUTOR
Mar 2018 - PRESENT

- Worked on Reference, Conda, and Solidity modules.
- Maintaining several personal modules such as Snakemake and LSP language support.

edgePy
GitHub

CONTRIBUTOR
Sep 2018 - PRESENT

- A Python implementation of edgeR for differential expression analysis.
- Implementing code and testing standards to the repo.

emacs-jest
GitHub

MAINTAINER
Dec 2018 - PRESENT

- A package to run Jest testing inside of emacs with a magit popup.