

Edmund A. Miller

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Education

University of Texas at Dallas

M.S. IN BIOTECHNOLOGY

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

Richardson, Texas

Aug 2018 - May 2019

University of Texas at Dallas

B.S. IN MOLECULAR BIOLOGY

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

Richardson, Texas

Aug 2015 - Aug. 2018

Skills

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

Experience

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

RESEARCHER

- Created a pipeline to reproduce and create new eRNA predictions using Snakemake.
- Used techniques such as containers, conda environments, and High Performance Computing Clusters.
- 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.

Richardson, Texas

Jul 2015 - PRESENT

Olypsis Technologies Inc.

SOFTWARE DEVELOPER

- 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.

Dallas, Texas

May 2018 - PRESENT

Millblock LLC

CO-FOUNDER

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

Richardson, Texas

Sep 2017 - PRESENT

Paul G. Hull, MD

APPRENTICE

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

Plano, Texas

May 2014 - Aug 2016

Projects

Doom-Emacs

CONTRIBUTOR

GitHub

Mar 2018 - PRESENT

- Worked on Reference, Conda, and Solidity modules.
- Integrated GitHub action for CI Testing.
- Helped new users become familiar with Doom's conventions.

edgePy

CONTRIBUTOR

GitHub

Sep 2018 - Dec 2018

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

emacs-jest

MAINTAINER

GitHub

Dec 2018 - PRESENT

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

Hackathons

ETHDenver

PROOF OF OPOSSUM

Denver, Colorado

Feb 2019

- Third Place Status
- A decentralized voting app for best Status nickname that made use of Formatic, GraphQL and the Graph, zepkit, and Status extensions.

ETHSF

LINK SET

San Francisco, California

Oct 2018

- First Place Set & Second Place ChainLink

ComethHacks

ROTOHIVE

Richardson, Texas

2018

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

ETHDenver

CRYPTO-ADVENTURES

Denver, Colorado

Feb 2018

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

ETHMemphis

ETH-TERM BETS

Memphis, Tennessee

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.

Extracurricular Activity

Dallas Blockchain

CORE MEMBER

Richardson, Texas

Jun 2017 - PRESENT

Artificial Intelligence Society

MEMBER

UT Dallas, Texas

Sep 2016 - PRESENT

Academic Excellence Scholarship

FRESHMAN MENTOR

Richardson, Texas

Aug 2016 - Dec 2016

GitHub

CAMPUS EXPERT IN TRAINING

Richardson, Texas

Aug 2018 - PRESENT

UT Dallas Rugby Football Club

CAPTAIN

Richardson, Texas

Aug 2015 - PRESENT

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