LEVI D. MCCLENNY

@ levimcclenny@tamu.edu 918.232.7131 College Station, TX people.tamu.edu/~levimcclenny DoD Secret Clearance

EXPERIENCE

Research Assistant

US Army Research Laboratory - ARL South Campus

May 2019 – Present Aberdeen Proving Ground, MD

- *Working remote from College Station, TX as an ORAU Journeyman*
- Research Assistant in the Vehicle Technology Directorate (VTD) at the Army Research Lab working on applying Deep Learning (CNNs, GANs, VAEs, etc) to microscale material images to better understand micro-level interactions in material systems with the goal of material fatigue estimation in future vehicles and aircraft
- Responsible for bringing aviation and informatics expertise into a large-scale maintenance optimization project for the Joint Artificial Intelligence Center (JAIC) involving analysis of over 27 TB of health monitoring system data for the H-60 platform
- Areas of expertise include multi-GPU accelerated deep CNNs and GANs, as well as other deep and machine learning techniques

UH-60L/M Blackhawk Pilot and Platoon Leader

US Army Reserve

August 2017 – Present Conroe, TX

- Accountable for 20 personnel, planning, training, and maintaining standardization for all pilots
- Directly responsible for 5 UH-60L aircraft, associated maintenance, and training operations
- Actively liable for over $50 million in US Army assets - including aircraft and ground equipment

Air Assault Badge (Distinguished Honor Graduate, class rank 1/220)

LEADERSHIP

Texas A&M Student Regent

Texas A&M University System Board of Regents

May 2019 – Present College Station, Texas

- Appointed by the Governor of Texas to serve as the sole student member to the Texas A&M Board of Regents - responsible for advocating for 167,000 students across 11 individual campuses
- Directly provide oversight to the Texas A&M University System's budget of ~$5 billion in revenue and expenditures, reviewing proposals as fit for the individual campuses in the system

Texas A&M Student Body Vice President

Texas A&M Student Government

May 2015 - May 2016 College Station, Texas

- Responsible for advocating for 68,000+ graduate and undergraduate students
- Co-founded a student organization to rent free business formal clothing to underprivileged students at all campuses in the system

TECHNICAL SKILLS

</> **Deep Learning** – Python, Keras, multi-GPU Tensorflow
</> **Machine Learning** – Scikit-Learn, RAPIDS (cuML, cuDF)
</> **Dev. Environments** – Docker, Nvidia-Docker (GPU), Jupyter
</> **Statistics** – R

SOFTWARE

</> Author/manager of the open source package R:Boolfilter, available on CRAN

EDUCATION

Ph.D. in Electrical Engineering (in progress)

Machine Learning and Artificial Intelligence

Texas A&M University

May 2021 (Tentative) College Station, Texas

- Completing additional certificates in *Statistics* and *Materials, Informatics, and Design*

2018 recipient of the Buck Weirus Spirit award for outstanding service to the Texas A&M campus community.

M.S. in Electrical Engineering

Genomic Signal Processing

August 2016 College Station, Texas

B.S. in Electrical Engineering Engineering

GPA - 3.54

May 2015 College Station, Texas

Cum Laude, Dean's List

SELECT PUBLICATIONS

"Utilizing Convolutional Neural Networks for Prediction of Process and Material Parameters from Microstructural Images"

Richard Couperthwaite, McClenny, Levi D., Ulisses M. Braga-Neto, Raymundo Arroyave.

2020 Annual Meeting of The Minerals, Metals & Materials Society (TMS)

In Review

"Semi-supervised Learning Approaches to Class Assignment in Ambiguous Microstructures"

Kunselman, C.J., McClenny, Levi D., Vahid Attari, Ulisses M. Braga-Neto, Raymundo Arroyave.

Acta Materiala

November 2019

"Boolean Kalman Filter with Correlated Observation Noise"

McClenny, Levi D., Mahdi Imani, and Ulisses M. Braga-Neto.

2017 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP)

June 2017

"BoolFilter: an R package for estimation and identification of Partially-Observed Boolean Dynamical Systems"

McClenny, Levi D., Mahdi Imani, and Ulisses M. Braga-Neto.

BMC Bioinformatics

November 2017