# Leo Battalora

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#### **EDUCATION**

Temple University, College of Engineering, Honors

Philadelphia, PA

**Bachelor of Science in Electrical Engineering** 

May 2022

GPA: 4.00, Summa Cum Laude, Concentration in Computer Engineering

## **PUBLICATIONS**

Tzu-Hui Yu, Bo-Han Su, **Leo Chander Battalora**, Sin Liu, Yufeng Jane Tseng. (January 2022). Ensemble modeling with machine learning and deep learning to provide interpretable generalized rules for classifying CNS drugs with high prediction power. *Briefings in Bioinformatics* (Volume 23, Issue 1). <a href="https://doi.org/10.1093/bib/bbab377">https://doi.org/10.1093/bib/bbab377</a>

### **WORK EXPERIENCE**

JPMorgan Chase & Co.

Wilmington, DE

Software Engineer Starting July 2022

JPMorgan Chase & Co.

Wilmington, DE

Software Engineering Intern (Full Stack)

June - August 2021

- Created an SQL-based caching server in Spring Boot which aggregated deployment information, monitoring data, and system logs for all company deployments to their internal cloud platform (AWS equivalent) from internal monitoring services used at JPMorgan including Splunk, Dynatrace, Satori (JPM specific), and Stratus (JPM specific).
- Designed and constructed a React-based UI which interfaced with the caching server to serve users a customizable dashboard of deployments that they are interested in viewing.

Lockheed Martin King of Prussia, PA

Software Engineering Intern (Backend)

June - September 2020

- Developed several custom Slack apps using NodeJS, including one to enable users to report
  offensive and inappropriate messages directly to HR from within the Slack UI. The apps
  would listen for events from the Slack Events API then programmatically generate emails
  (to HR) and call the Slack Web API to interface with users (serving custom modals and
  generating toasts and messages).
- Implemented a GitLab Pipeline which would test and deploy the apps to Pivotal Cloud Foundry. Tokens and secrets were securely passed as environment variables to the container.

### Computational Molecular Design & Metabolics Lab (CMDM)

Taipei, Taiwan

Machine Learning Researcher

February - December 2020

 Reconstructed and validated machine and deep learning experiments which successfully improved predictivity and interpretability of DL models for CNS drug discovery.

### Neural Engineering Data Consortium (NEDC)

Philadelphia, PA

Lead Unix System Administrator

December 2019 - January 2021

- Managed a university HPC cluster consisting of 14-compute nodes and over 2 petabytes of HIPAA sensitive information using tools and technologies such as Slurm, Warewulf, ZFS, Anaconda, CentOS Linux, compiling from source and A LOT of shell scripting.
- Lead weekly Agile meetings, trained new admins, and troubleshooted ML experiments with graduate students.

**AWARDS** 

Goldwater Scholar 2021

Selected as one of 408 college students from a pool of over 5,000 college sophomores and juniors across the United States for "demonstrating a passion for doing research and exhibiting the creative spark that will make [me] a leader in [my] field".

## John L. Rumpf Award

2022

Selected from my graduating College of Engineering class at Temple University for "demonstrating an outstanding understanding of the concepts of engineering, a strong development of character and ethical behavior, and the greatest potential for success in the profession of engineering".

## First Honors in Electrical Engineering

2022

Selected from my graduating College of Electrical and Computer Engineering class at Temple University for finishing with the highest cumulative grade point average.

#### **SKILLS**

**DevOps:** GitHub Actions, Docker, Git, Google Cloud Platform (Compute Engine, Cloud Run, VPC Network, Artifact Registry, Kubernetes Engine), Amazon Web Services (EC2, Cloud9, RoboMaker), RESTful Services, GraphQL, Spring Boot

Machine Learning: Scikit-learn (Support Vector Machine, Decision Tree, Random Forest), Tensorflow (Graph Convolutional Network)

System Administration: Linux, Slurm, Warewulf, ZFS, Anaconda, CentOS/RHEL

UI/UX: React, Next.js, Vue.js, NuxtJS, Tailwind CSS

**Computer Languages:** C, C++, CUDA, Go, Python, Kotlin (Android), Java, Javascript, NodeJS, Bash, HTML/CSS, MATLAB, AVR Assembly, MIPS, Verilog

**Human Languages**: German, Chinese (Mandarin)