

# Sevan Brodjian

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## EXPERIENCE

### Ameren

UIUC Research Park, IL | Oct. 2020 - Present

#### *Assoc. Data Scientist & Data Science Intern*

- **Led** a high-performing team of 8 interns ranging from undergrad to PhD, using Agile Scrum to deliver 3 cutting-edge Machine Learning projects and the team's most successful summer to date
- **Developed** a high-accuracy Deep Survival Analysis RNN model predicting employee attrition, resulting in substantial cost savings due to data-driven insights
- **Trained and deployed** end-to-end ML pipelines using Python, SQL, and cloud tools to automate processes in forecasting and classification, resulting in dozens of man-hours saved per week
- **Spearheaded** the development of the S3Synchrony Python package which provides automatic versioning for AWS S3 with checksums and the boto3 library enabling the group's full adoption of S3 for data storage

### Bank of America

Chicago, IL | May 2022 – Aug. 2022

#### *Cybersecurity Analyst*

- **Conducted** in-depth research on security risks associated with various corporate products and services, enabling the team to evaluate three times more services per week.
- **Demonstrated** practical expertise in cybersecurity by participating in simulated pentesting exercises on a Kali Linux setup.

### ICORLAB Semiconductor Laboratory

Champaign, IL | Feb. 2020 – Aug. 2021

#### *Undergraduate Researcher*

Simulation of Wide-bandgap Electronics || PI: Prof. Can Bayram

- **Designed** novel microelectronic power devices composed of wide-bandgap materials, including GaN HEM transistors & Diamond PiN Diodes, using Synopsys Sentaurus to generate mesh files
- **Simulated** electrical device characteristics by writing Lisp-like Sentaurus Device TCAD scripts to analyze efficacy of designs
- **Led** the development of a visual app to optimize the maximum number of dies on a wafer through a proprietary algorithm with advanced features not publicly implemented elsewhere

## EDUCATION

### University of Illinois Urbana-Champaign

B.S. in Computer Engineering

**GPA: 3.98/4.00**, December 2022

Dean's List, High Honors

Cognitive Neuroscience, A.I., Applied ML, Calculus III, Differential Equations, Linear Algebra, Discrete Maths, Analog Signal Processing, Quantum Physics, Data Structures, Semiconductor Electronics, Algorithms, Probability

## AWARDS & HONORS

Dobberpuhl Student Award 2022  
\$2,000

CHP Research Support Grant 2021  
\$2,000

Illinois Eng. Achievement Scholarship 2021  
\$1,000

Chao, Bei Tse & May Award 2020  
\$6,000

OUR Research Grant 2020  
\$2,500

Engineering Visionary Scholarship 2019  
\$24,000

AIM High Engineering Grant 2019  
\$20,000

Chancellor's Scholar 2019  
\$4,000

ACT Score of 36-36-36-36 2019

## SKILLS

**Python** (Pandas, SK-Learn, Pytorch, Numpy, Matplotlib, XGBoost, Catboost)

**Cloud** (Databricks, MLFlow, AutoML, Apache Spark, AWS S3, AWS Sagemaker, AWS Lambda)

**Analytics** (Network & Survival Analytics, SQL, Random Forest, Timeseries, SVM, PCA, Regression, KNN, Transfer & Deep Learning, Transformers)