Leo Deng

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EDUCATION

Purdue University - GPA: 3.96   *West Lafayette, IN*
Bachelor of Science in Computer Science   *August 2023 - December 2025*
- **Relevant Coursework:** Multivariable Algebra, Linear Algebra, Foundations of Computer Science
- **Other Coursework:** John Deere ML Courses: Python-2, Data-2, Stanford ML Course and Project
- **Awards:** USA Coding Olympiad Gold Division, 3rd Place at Hello World Hackathon

EXPERIENCE

Data Mine - Raytheon TRL Model Team   *West Lafayette, IN*
Data Science Researcher   *January 2024– Present*
- Created code to train and save BERT model weights based on accuracy; used by entire TDM Raytheon team
- Worked with TRL team to create end to end training code for BERT for NLP model

Mercury Health - UC San Diego Funded Startup   *San Diego, CA*
Machine Learning Engineering Intern   *April 2022– January 2024*
- Implemented confidence sorting and device retrain in data labeller with Python, PostgreSQL improving labeling efficiency
- Developed an unofficial Ring API in Typescript to create an hls stream to view images for Ring camera systems
- Manipulated training datasets for 8 devices to increase overall accuracy by 30%
- Ambassador to 5 healthcare organizations to ensure customer satisfaction, leading to more onboarded devices and funding
- Created synthetic fall data algorithm to improve unbalanced datasets using AWS Lambda, AWS S3, Postgres

Amazon Web Services   *West Lafayette, IN*
Open Source Contributor Initiative Intern   *September 2023 - December 2023*
- OpenSearch Dashboard Repository (1.4k stars) Team to create data visualization tools to automate business intelligence
- Improved pull request workflow, increasing development efficiency and integration for future company contributions
- Presented weekly contributions to Amazon engineers and directors, and guided other team members on specialized issues

Sustainable Computing Laboratory - Notre Dame University   *South Bend, IN*
Machine Learning Research Intern   *June 2022– June 2023*
- Helped develop a modified 4D LSTM training model and tune loss algorithm to improve accuracy of dataset by 15%
- Implemented different loss models and tested model over different hyperparameters
- Co-wrote and proofread current research project in predicting liver cancer research

Vitu - Motor Vehicle Software   *Agoura Hills, CA*
Software Engineering Intern   *June 2022 – August 2022*
- Created Pandora program in Python using base64 API to automate 200 car registration and signature documents scans
- Liaison between agile team of 6 interns and software engineering team, using bitbucket and git to ship team progress
- Presented code and impact to CEO at Vitu Headquarters and mapped future goals for the program

PROJECTS

SpotifySifter : spotifysifter.com   *September 2023 - Current*
- Full stack web application in React using OAuth2 and Spotify Web API to remove skipped songs from selected playlists
- Hosted application on Railway, connecting Flask backend to Postgres database with AWS RDS and Railway services
- Set up cron to constantly refresh user access tokens and listen to user activity

GitMe (3rd Place at Hello World Hackathon) : devpost.com/software/gitme-amuryi   *September 2023*
- Developed a GitHub repository summary tool for resume planning with Github and ChatGPT API in React and Python
- Implemented frontend homepage features, routing with React Router, and input to fetch backend endpoint
- Lead project workflow and organized team structure with Figma and GitHub; presented project demo

LEADERSHIP & INVOLVEMENT

Machine Learning @ Purdue Club   *West Lafayette, CA*
Treasurer, Vice President of Finance   *August 2023 - Current*
- Managed club finances and company outreach to promote club participation in machine learning projects
- Organizer of club social events to let project managers and team members connect outside of retrospective teams
- Organized largest attended callout in club history; created many slides and marketing strategies

SKILLS

Programming Languages: Python, C++, C, Java, JavaScript, TypeScript, SQL, Rust, HTML, CSS, SCSS
Technologies: Git, GitHub, BitBucket, React, Flask, PyTorch, TensorFlow, Node.js, AWS Lambda, AWS RDS, Railroad