Lya Mun

Los Angeles, CA | 213-431-7939 | lyamun2023@gmail.com | github.com/lyamun | linkedin.com/in/lya-mun/

Education

University of Illinois at Urbana-Champaign, Champaign, IL   May 2026 (expected)
Bachelor of Science, Computer Science + Advertising   GPA: 3.81/4.0
- Dean's List (2024); Hearsey H & L Scholarship (2025), Evans Minority Students Scholarship (2025-2026)
- **Coursework**: Data Structures & Algorithms, Discrete Structures, CS (Java/C++), Databases, Linear Algebra, Data Science
  Planned: Software Design, Computer Architecture, Algorithms and Models of Computation

Technical Skills

- **Languages**: C++, Java, Python, JavaScript, HTML/CSS, SQL, C#, Swift
- **Frameworks & Libraries**: Django, Node.js, React Native, jQuery, ASP.NET MVC
- **Others**: VS Code, Android Studio, MySQL, Git, GitHub, Docker, Heroku, Tmux, Microsoft Office, Adobe Creative Suite

Professional Experience

GamePlay, Inc. | *C#, React Native, ASP.NET MVC, Postgres, Xcode*   May 2025 – Present
Mobile Application Developer Intern   San Francisco, CA (Remote)
- Built and tested React Native components using the iOS simulator for features like team creation and scheduling
- Contributed to MVP planning, integrating ASP.NET MVC with PostgreSQL and joining daily stand-up meetings

Quve17 | *Python, PyTorch, TensorFlow*   June 2024 – July 2024
Software/Research Engineer Intern   Seoul, South Korea
- Built an IPA algorithm in Java for the dental patient feedback platform, doubling response rates to 30%
- Enhanced neural networks for automated dental crown design by refining feature extraction and model performance
- Conducted research in prosthodontics to improve segmentation accuracy of teeth vs. gingiva in AI workflows
- Labeled 3D dental data using Meshmixer and structured JSON to boost annotation precision and training quality

Siesoft | *HTML, CSS, JavaScript, Adobe Photoshop, Illustrator*   May 2021 – Aug. 2021
Front-end Developer Intern   Los Angeles, CA
- Designed polished and client-tailored UI mockups using Adobe Photoshop and Illustrator for web applications
- Developed fully responsive, cross-platform web interfaces with HTML, CSS, and JavaScript
- Improved responsive user experience by applying modern frontend principles, focusing on usability and accessibility

Projects & Research Experience

Sublease Finder iOS Application | *SwiftUI, MapKit, Firebase Auth, Xcode, UIKit*
- Built a dual-flow app for browsing/posting subleases with search, map listings, image upload, and availability
- Integrated Firebase Auth for login and gated access to contact/post features with validation and image input
- Designed reusable components and layouts (e.g., FlowLayout), optimizing navigation and alignment with Apple HIG

Stock Price Prediction Web Application | *React, FastAPI, Python, Alpha Vantage API, GitHub Pages*
- Developed a full-stack web app to forecast next-day stock prices using linear regression, with React and FastAPI
- Built responsive React UI with Chart.js visualizations and FastAPI backend for live data fetching
- Implemented CI/CD workflows and streamlined deployment with GitHub Actions, ensuring fast iteration and stability

Self-Supervised Learning for Multimodal Time-Series Signals/IoT Sensing | *Python, PyTorch, TensorFlow*   Jan. 2025 – May 2025
Undergraduate Student Researcher
- Built a self-supervised pipeline for human activity recognition using multimodal time-series signals from IoT devices
- Pretrained a ViT-based Masked Autoencoder (MAE) using unlabeled sensor data with as little as 1% labeled input
- Matched fully supervised model performance within 10% using 99% fewer labeled samples across 12 sensor classes
- Demonstrated 4× faster training per epoch during fine-tuning compared to end-to-end supervised learning

Individual Cattle Face Identification Using Computer Vision | *Python, PyTorch, OpenCV, NumPy, Docker*   Aug. 2024 – May 2025
Undergraduate Research Assistant
- Built YOLOv8 models to detect and classify 133 cattle with near-perfect accuracy using 200 top-view images
- Reduced annotation errors by 40% by automating image labeling with Label Studio and refining bounding boxes
- Boosted model robustness by 10× data scaling with rotation and Gaussian noise augmentation
- Enhanced classification of visually similar cattle by 60% through dataset/labelling improvements

Personal Portfolio Website (fldk0804.github.io/website/)

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- Built YOLOv8 detection and classification models, Achieved near-perfect accuracy identifying 133 cattle IDs with YOLOv8 on 200 top-view images
- Built YOLOv8 models to detect and classify 133 cattle with near-perfect accuracy using 200 top-view images
- Reduced annotation errors 40% via auto-labeling with Label Studio and refined bounding boxes
- Boosted model robustness by 10× data scaling with rotation and Gaussian noise augmentation
- Enhanced classification of visually similar cattle by 60% through dataset/labelling improvements

Others: IBM SPSS, Meshmixer, MS Office, Docker, Heroku, Adobe Suite, ASP.NET MVC

Stock Prediction ()   May 18, 2025
- Included API
- predict stock price based on __ witht the feature educating the user with latest news and basic economic knowledge for

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Institute of Transportation Engineers (ITE@UIUC) | *Python, Visual Studio Code*   Aug. 2023 – May 2024
Data Scientist
- Forecasted bus ridership and optimized routes in Urbana MTD using Python for improved efficiency
- Applied machine learning algorithms to visualize vehicles, further enhancing traffic management and planning

Individual Cattle Face Identification Using Computer Vision | *Python, Colab, Docker, Label Studio*   Aug. 2024 – Present
Research Assistant
- Built YOLOv8 detection and classification models using 200 top-view images, achieving near-perfect accuracy in identifying 133 cattle IDs across diverse datasets to improve livestock management for small-scale farmers
- Performed data cleaning and processing by manually cropping images, using customized dataset on pretrained model, and drawing precise bounding boxes to minimize errors and improve model accuracy
- Balanced training datasets through advanced augmentation techniques, creating 2,010 samples—10x the original size—to significantly enhance model robustness
- Addressed visually similar cattle by optimizing classification through refined labeling techniques and dataset curation, ensuring accurate differentiation in edge cases

| **Language:** English, Korean, Spanish (Limited)

Engineering Open House (EOH) Project   Urbana, IL
Engineer & Web Developer for Spin Launch Project   Oct. 2023 – Apri. 2024
- Engineered Arduino rocket trajectory with Python for enhanced efficiency and environmental sustainability
- Developed the 'Spin Launch' website, significantly boosting user engagement and project visibility

Undergraduate Research Assistant, UIUC \nJan 2025 – Present

~~iANT Education~~   ~~Aug 2019 – Feb 2020~~
~~C++ Programming Project Teacher Assistant~~   ~~La Crescenta, CA~~
- ~~Offered Sunday peer-to-peer coding support, aiding with projects and providing specialized support in debugging~~
- ~~Created an evaluation form to assess students' coding skills, providing valuable feedback to teachers and parents~~

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Awards & Accomplishments

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Individual Cattle Identification through Artificial Intelligence   Champaign, IL
Student Researcher
University of Illinois at Urbana-Champaign, Department of Agricultural and Biological Engineering (ABE)
Undergraduate Research Assistant; Advisor: Shen   Aug. 2024 – Present

- Developed 'Spin Launch' website, boosting engagement and visibility

- Designed a self-supervised learning pipeline for human activity recognition using multimodal time-series signals collected from IoT device using Masked Autoencoder (MAE) with Vision Transformer (ViT) backbones to pretrain on unlabeled sensor data and capture long-range temporal patterns across modalities
- pre-trained a Masked Autoencoder (MAE) on unlabeled data and fine-tuned with as little as 1% labeled data, achieving up to 64.2% accuracy and 62.6 F1-score—within 10% of fully supervised models trained on 100% labels.
- Fine-tuned with 90% fewer labels, improving performance and cutting annotation costs and training time by over 50%
- Demonstrated 4x faster training per epoch during fine-tuning compared to end-to-end supervised learning