Forrest Meng

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EDUCATION

Virginia Polytechnic Institute and State University, Blacksburg, VA *2021-2024*

*Bachelor of Science in Computer Engineering (Machine Learning) | Minors: Computer Science – **3.97 GPA***

WORK EXPERIENCE

Grand Charter, Founding Engineer, New York City, NY *August 2024 – Present*

- Led engineering at 8VC/Bedrock-backed legal tech startup serving as the operational layer for civil law; closed $2.4M in software contracts with major firms nationwide including Pond Lehocky and Keller Postman, serving 18,000+ plaintiffs.
- Architected core SOC2 and HIPAA compliant platforms for case management, litigation financing, and lead generation using Next.js, Redis caching, OAuth 2.0 with PKCE, AWS infrastructure, and integrations with Plaid, Salesforce, Zapier, and Posthog.
- Built efficient AI/ML pipelines for case classification, text-to-SQL generation with LLMs, medical chronology automation, web scraping using computer use agents, and document generation; presented Palantir DevCon 4 with the Startup Fellowship.
- Hired engineers, interns, and designers and collaborated with lawyers on products through onsite forward deployed work.

Lute.gg, Software Engineer (Contract), Remote *August 2025 – Present*

- Built backend services and Discord/Telegram bots for a social crypto trading terminal, achieving transaction speeds 200% faster than industry average on cross-chain support with Solana, BNB, and Abstract chains, maintaining high availability.
- Implemented rewards, partners, and referral systems with secure WebSocket communication between bot servers, backend, and blockchain indexers for token lookups, quick buys, and wallet management.

Susquehanna International Group, Software Engineering Intern, Bala Cynwyd, PA *June 2024 – August 2024*

- Bridged to all traders new multicast data from parsers and strategy programs in C++ to market data visualizers in C# and .NET.
- Upgraded strategy sharing applications with high-fidelity 'trashcan' features in .NET and dragging interactions in Svelte.
- Researched cointegration pairs trading strategies and LSTM models in an algorithmic trading project and quant dev challenge.

Roblox, Software Engineering Intern, San Mateo, CA *May 2023 – August 2023*

- Launched a new “Interactable” dev-facing state and higher fidelity APIs for GUIObjects in production Studio and Game clients.
- Lead cross-team system design meetings on new UI state implementations and algorithms with legacy C++ components.
- Accelerated the performance of UI state changes with async layer data model tasks and efficient quadtree collision checks.

SCOUT Inc., Software Engineering Intern, Alexandria, VA *May 2022 – August 2022*

- Trained EfficientPose algorithm-based AI and CV model to detect the attitude for LEO space domain awareness applications.
- Automated the generation and evaluation of 16,000 images, achieving an 85% pose detection accuracy from the AI model.

RESEARCH AND PROJECTS

Founder, Artscaper.net, Fairfax, VA *November 2022– July 2023*

- Built an image search and real-time collaborative reference tool for artists using SvelteKit, Typescript, and TailwindCSS.
- Incorporated OpenAI GPT-3.5 API for query generation with Weaviate and FAISS for returning semantically relevant images.
- Onboarded 50 beta testers and art studios with a secure OAuth, SMTP server, and custom built websocket-based live canvas.

Research Project, NeRF This, Blacksburg, VA *February 2023 – July 2023*

- Systematized stable diffusion models with neural radiance field pipeline to increase visual accumulation in NeRF render.
- Formulated a “camera-walk” algorithm, moving the camera matrix along NeRF normals to generate new views stochastically.

Undergraduate Research Assistant, Collaborative Robotics Lab, Blacksburg, VA *August 2022 – June 2023*

- Implemented real-time SLAM algorithms on a FETCH Mobile Manipulator robot through collected visual and infrared data.
- Trained risk-averse ML algorithm to CARLA for a user study scenario where the robot predicts and guides a human’s behavior.

Team Lead, Latis Network, Blacksburg, VA *December 2022– May 2023*

- Employed Hedera contracts to facilitate transaction consensus and staged files on IPFS for Filecoin decentralized blob storage.
- Reported the project to Boeing CEO and execs, showcasing applications of DLTs in mitigating unauthorized firmware access.

ADDITIONAL INFORMATION

Technical Skills: Python, C++, Java, C, TypeScript, Svelte, C#, ReactJS, FastAPI**,** PostgresQL, Linux bash, TailwindCSS, MATLAB, GitHub, Keras, Jupyter, Tensorflow, PyTorch, NextJS, Unity, Pandas, OpenCV, AWS, .Net, Rust