FAYE (FEI) XIA

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CMU Chemical Engineering student and AI startup co-founder focused on turning user needs into practical AI solutions. Combines technical evaluation, product prioritization, and cross-team coordination to move ideas from problem definition through development.

EDUCATION

Carnegie Mellon University Expected May 2028
B.S. Chemical Engineering; Minors in Biomedical Engineering and Machine Learning

EXPERIENCE

Mafold July 2026 - Present
Co-founder | AI Agent Product Development | Website
- Identified a gap in sharing personal-agent work across teams; proposed agent-to-agent collaboration and partnered with a backend engineer to break the concept into technical tasks and privacy requirements.
- Co-defined an access-control approach using owner-managed allowlists and owner-consent escalation for sensitive requests, addressing authorization and information-sharing risks in the proposed workflow.
- Helped establish weekly team syncs and shared issue tracking in group chat across a 12-hour time difference; defined agent-first troubleshooting and backend escalation to address duplicate work and engineer workload.

Procter & Gamble | Oral Care R&D May 2026 - August 2026
Digital Innovation Intern | Portfolio
- Gathered stakeholder needs for an R&D knowledge chatbot, clarified expectations with a manager and coach, and translated user requests into technical questions and requirements for engineering discussions.
- Coordinated meetings with a Europe-based engineer and scheduled user testing to collect feedback before subsequent engineering discussions, connecting stakeholder needs with technical iteration.
- Evaluated an existing RAG pipeline against R&D retrieval needs; identified mismatches in query interpretation and retrieval relevance, informing the choice of Databricks-native retrieval and text-to-SQL tools.
- Built an automated data pipeline across 5,000+ research documents, parsing irregular formats and embedded attachments into Databricks to support chatbot access to R&D information.

Carnegie Mellon University | Kitchin Lab December 2025 - Present
Researcher | Opentrons code | Viscosity research
- Audited a viscosity ML benchmark spanning 39,077 measurements; standardized 1,733 molecular representations into 1,367 unique molecules, uncovered training overlap in 27 of 65 test molecules, and designed 2 evaluation protocols to assess generalization.
- Designed and executed 8 robustness tests for MixEmbed, identifying 7 defects across input validation, missing-data handling, and dependency compatibility; communicated findings to the library maintainer, resulting in fixes for all 7 issues.
- Developed Opentrons Flex protocols for 96 dye mixtures at 4 wavelengths; validated predictive models on 20 held-out wells (R-squared: 0.9912-0.9989).

PRODUCT & PROJECT LEADERSHIP

L'Oreal Brandstorm | ECHOlogne November 2025 - February 2026
Fragrance Innovation Competition | Initial-stage participant | Project
- Conducted luxury-fragrance market and competitor research to inform Prada brand selection and product positioning; identified opportunities in personalization and differentiation from lower-cost alternatives.
- Helped define features, pricing, and a phased rollout roadmap for a proposed refillable fragrance system with an NFC-connected app, aligning the product concept with Prada brand identity.

Monument Valley Game Replica | CMU 15-112 May 2025
Group Leader | GitHub | Video
- Led a student team in developing a playable Python game integrating user interaction and game logic; selected for the Top 20 Projects Gallery out of 150 projects.

SKILLS & HONORS

Program & product: Technical requirements, task breakdown, cross-functional coordination, risk assessment, issue prioritization, user testing, product roadmapping.
Technical: RAG, LLM orchestration, SolidWorks, COMSOL Multiphysics, Power BI, KNIME, Python (NumPy, pandas, scikit-learn), SQL, C/C++, MATLAB, Git, Databricks, text-to-SQL, regression, cross-validation, Opentrons Flex.
Honors: Dean's List (Fall 2024, Spring 2026); $4,500 ChESS Research Fellowship (2025); patent co-inventor (2024).