Fei Xue

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RESEARCH INTEREST

Human–AI Interaction, Affective Computing, Empathetic Interfaces, Online Harm Mitigation, Social Computing, AI Ethics

EDUCATION

Northeastern University | Boston, MA   **Expected Jul 2026**
Master *of Science, Computer Software Engineering*   GPA: 3.67
Guilin University of Electronic Technology | Guilin, China   **Jul 2023**
Bachelor of Laws (LL.B.), Intellectual Property Law

PUBLICATIONS

- Shan, G., Riedl, C., & Xue, F. (2025). *Preventing Real-world Doxing by Cataloging Incidents: A Doxing Incident Database*. SSRN Working Paper.
- Xue, B.-P. & Xue, F. (2022). *Research on System of Access and Benefit Sharing of Traditional Knowledge Related to Genetic Resources*. *Journal of MUC (Natural Sciences Edition)*.

RESEARCH EXPERIENCE

Northeastern University | Boston, MA | *Research Assistant*   **January 2025 – Present**

- Designed a reporting platform (Doxxing Incident Report) to study how emotionally supportive interfaces impact user experience in online harm scenarios.
- Prototyped a chat-based interface with avatar mood feedback and AI prompts to comfort users during sensitive incident reporting.
- Built a privacy-preserving backend system with full-text search and structured metadata tagging for user-submitted reports.
- Integrated GPT-4 and DALL·E to auto-summarize incidents and generate visuals for content moderation workflows.
- Analysed trade-offs between transparency, emotional safety, and user trust in human-AI interaction design.

Geode Blockchain | Remote | Software Engineer Intern   **May 2025 – Present**

- Investigated how to translate natural language inputs into safe and trustworthy blockchain actions in high-stakes governance scenarios.
- Designed a dialogue agent framework combining local LLMs, intent detection, and RAG-based grounding in blockchain state.
- Collaborated with protocol engineers to define ethical guardrails, ensuring input-output mappings remain interpretable and verifiable.
- Explored how interface cues influence user trust in AI-driven action execution on decentralized platforms.

SKILLS

Languages & Frameworks: TypeScript, JavaScript (Node.js, Express), Python, Java (Spring Boot), React.js
Databases: MySQL (Sharding, Read/Write Separation), MongoDB, Redis, Sequelize ORM
Cloud & DevOps: AWS (ECS, Lambda, SQS, S3, Route 53), Docker, GitHub Actions, CI/CD
System Design: RESTful APIs, JWT, RBAC, Microservices, Caching, Rate Limiting, Structured Logging
AI & Automation: OpenAI API (GPT-4, DALL·E), Puppeteer, Async Task Queues
Tools & Collaboration: Git, GitHub Flow, Conventional Commits, Figma

SELECTED PROJECTS

Social Wave | *Backend Developer*

- Explored scalable authentication and access control schemes (JWT + RBAC) in user-generated content systems.
- Implemented comment pagination and Redis-accelerated interactions to simulate high-concurrency moderation scenarios.
- Designed database sharding and read/write separation as a case study in distributed system optimization.

ChildArt Magazine Platform | *Frontend Developer*

- Investigated inclusive design strategies in children-focused cultural platforms.
- Designed and developed responsive, accessible components in collaboration with visual designers.
- Integrated interaction patterns (carousel, partner showcases) with a focus on user attention and narrative continuity.