CICI YUTONG CHENG

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EDUCATION

Department of Computer Science, Virginia Tech   VA, United States
Ph.D. in Computer Science   2024 - *present*

- Advisor: Dr. Peng Gao
- Research area:
  - Automated and AI-assisted security operations (SecOps)
  - LLM/MLLM specialization and customization
  - Agentic planning, reasoning, and learning

School of Software Engineering, Beijing Jiaotong University   Beijing, China
B.E. in Software Engineering   2018 - 2022

PUBLICATIONS

1. **Yutong Cheng**, Osama Bajaber, Saimon Tsegai, Dawn Song, Peng Gao. CTINEXUS: Automatic Cyber Threat Intelligence Knowledge Graph Construction Using Large Language Models. *In Proceedings of the 10th IEEE European Symposium on Security and Privacy, (Euro S&P), 2025.*

2. Junjielong, Xu and Qiuai, Fu and Zhouruixing, Zhu and **Yutong, Cheng** and Zhijing, Li and Yuchi, Ma and Pinjia, He. Hue: A user-adaptive parser for hybrid logs. *Proceedings of the 31st ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), 2023.*

INTERNSHIPS & EXPERIENCE

Llama Family | Algorithm Developer   2023.09 - 2023.12

- Fine-tuned Llama2-Chat model with Chinese datasets to enhance Chinese conversational abilities.
- Integrated LangChain framework to improve model performance in Chinese applications.

AtomEcho | Algorithm Developer   2023.06 - 2023.09

- Developed a framework (AtomTool) for integrating tool utilization skills into LLMs.
- Implemented API integrations to enhance LLM's tool usage capability, improving LLM accuracy in handling complex API parameter settings.
- Reduced the hallucination phenomenon by refining prompt design and retrieval methods, improving LLM response accuracy and reliability.

Chinese University of Hong Kong | Research Assistant   2022.09-2023.06

- Collaborated with a cloud company to collect and curate log data from multiple departments, enabling comprehensive log analysis.
- Developed a two-step log grouping algorithm combining coarse- and fine-grained techniques, utilizing a multinomial search tree for efficient template extraction.
- Designed a template updating mechanism that incorporated human feedback to resolve ambiguous tokens, enhancing overall system accuracy.

Yuewen Group, Tencent | Backend Developer   2020.06 - 2020.09

- Developed dynamic UI customized to user interests, integrating real-time content recommendation statistics.
- Created responsive framework to adjust interface content based on user click feedback.

AWARDS & HONORS

- **2025 CCI SWVA Cyber Innovation Scholarship**   2025.03
- **2024 Bitshares Fellowship**   2024.09
- **2024 CCI SWVA Cyber Innovation Scholarship**   2024.03

PROFESSIONAL SERVICES

- **Student Organizer**, for the 2024 DMV Security Workshop.
- **External Reviewer**, for CCS, DLSP, TOPS, Euro S&P, S&P, KDD, Asia CCS, NDSS