# Jung In Chang

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## Education

**University of Illinois at Urbana-Champaign**                    *08/2025 – 05/2026 (expected)*
Master of Computer Science

**Boston University**                    *09/2019 – 05/2022*
B.S in Computer Engineering, Concentration in Machine Learning                    *Dean's List for 3 semesters*

## Work Experience

**Veson Nautical**                    *Boston, MA*
*Full Stack Software Engineer*                    *08/2022 – 06/2025*

- Built full-stack services for "IMOSX CoCaptain," an automated billing system, including data modeling, API integration, and production monitoring, contributing to a $6M contract with Top 3 oil shipping companies.
- Streamlined a data replication pipeline across distributed systems using SQL, MongoDB, AWS SNS/SQS and Lambda, achieving a 22% reduction in P99 data latency while supporting 11K+ concurrent users.
- Deployed containerized microservices on Kubernetes and optimized the TypeScript-based architecture, enabling 18% higher user traffic capacity and improved scalability for global maritime logistics clients.
- Designed a remote/local caching system to optimize CI/CD pipeline performance, reducing completion time by 75%.
- Architected UI/UX for a client-facing maritime commerce application using Next.js and React, collaborating closely with designers and stakeholders to incorporate client feedback.

**Codecrain Inc.**                    *Seoul, South Korea*
*ML Engineer Intern*                    *06/2021 – 11/2021*

- Developed core ML engines of a "Reviews Analytics" platform, enabling automated webpage text analysis using ODP classification, named entity recognition, and sentiment analysis.
- Trained and fine-tuned CNN-LSTM sentiment models in PyTorch, achieving a 10% improvement in F1-score through optimized preprocessing, tokenization, and hyperparameter tuning.
- Built an automated web crawler and AWS S3-based ingestion pipeline to collect, clean, and structure over 200K text samples for large-scale training and evaluation.

## Projects

**Chi-311 Agentic AI**                    *08/2025 – 12/2025*

- Built an MCP-compatible agentic AI server enabling LLMs (ChatGPT, Claude) to automatically submit Chicago 311 service requests through structured tool discovery and real-time orchestration.
- Implemented Playwright-based automation to execute end-to-end civic workflows with validation and error handling.

**TripCircle —Travel Planning Social-Media**                    *09/2025 – Present*

- Architected a full-stack collaborative planning platform with shared itineraries, map-based routing, and budget tracking using React, TypeScript, Node.js, and MongoDB.
- Designed AI-assisted and document parsing workflows to convert user context into structured trip plans.

Additional Projects: AT&T 5G Network Performance Testing, Social-media Stock Estimator, Clothing Suggestion app.

## Skills

Engineering:    Full-Stack Development, Distributed Systems, DevOps, Deep Learning, Data Mining, NLP
Tech Stack:    Typescript, React, Node.js, AWS, Python, PyTorch, TensorFlow, Docker, MongoDB, MySQL, C++, C#,

## Honors & Awards

**2019 Artificial Intelligence & Machine Learning Case Competition**                    *Boston University | 11/2019*

- Awarded for presenting innovative ideas on real-life AI applications and business models.

**Award of RIMPAC 2018 (Rim of the Pacific Exercise)**                    *RIMPAC Squadron | 08/2018*

- Accomplished outstanding performance at RIMPAC 2018 as a naval engineer and sailor interpreter.