

# Bennett R. Wu

Personal info redacted for online version. Please contact me via [LinkedIn](#).

[bwu.dev](http://bwu.dev) || [github.com/bennettrwu](https://github.com/bennettrwu) || [linkedin.com/in/bennettrwu](https://linkedin.com/in/bennettrwu)

## Education

### University of Illinois Urbana Champaign

BS-MCS in Computer Science

Minor in Mathematics

GPA 3.93 / 4.00

Aug 2022 - May 2026

- **Coursework:** Artificial Intelligence, Computer Vision, Communication Networks, Cloud Computing, Cryptography, Database Systems, Distributed Systems, Operating Systems, Parallel Programming (CUDA)

## Work Experience

### Amazon

Seattle, WA

Software Development Engineer Intern

Jun 2025 - Aug 2025

- Architected and implemented a scalable data analysis pipeline to detect patterns in logistics data, processing over 30 billion GPS data points by leveraging AWS EMR, AWS Glue, and Apache Spark
- Deployed AWS infrastructure (EMR, Glue, Step Functions, S3, RDS, Lambda) using AWS CDK to eliminate manual configuration and ensure repeatable deployments
- Developed a full-stack web application with an interactive map view and on-demand filtering, enabling investigators to quickly visualize and investigate results and address a critical data observability gap

### Expedia Group

Chicago, IL

Software Development Engineer Intern

May 2024 - July 2024

- Eliminated the need for 184 duplicate licenses by unifying fragmented Salesforce integration
- Integrated a Kafka consumer to process ad campaign events in a Kotlin SpringBoot application
- Collaborated with cross-functional teams to validate project requirements, ensuring on-time and accurate delivery of key features

### AbbVie

North Chicago, IL

Summer Worker

May 2023 - Aug 2023

- Slashed analysis time from one week to a few minutes for nuclear magnetic resonance spectra analysis through automation by Python scripts
- Ensured seamless machine learning data collection by building a web application on AWS for scientists to quickly view and validate machine predictions to provide human-in-the-loop feedback

## Projects

### ScribeAR

[github.com/scribear](https://github.com/scribear)

Python, Node.js, Typescript, React

Aug 2024 - Current

- Co-developed ScribeAR, a live captioning system for classrooms that improves accessibility in courses and office hours
- Architected and implemented session management backend that enables users to instantly access the transcription sessions on their own devices, such as phones or AR glasses, via a QR code
- Engineered backend transcription service that provides accurate and low latency (< 2 second) automated speech recognition for multiple concurrent audio streams using OpenAI Whisper

### NER Extension

[github.com/bennettrwu/ner-extension](https://github.com/bennettrwu/ner-extension)

PyTorch, Python, TypeScript

Aug 2023 - Aug 2023

- Built and trained transformer machine learning model detailed in *Template-Based Named Entity Recognition Using BART* (Cui, Leyang et al., 2021) to perform named entity recognition (e.g. people, locations)
- Implemented Chrome browser extension to allow user to interact with language model to highlight named entities on websites. Demo here: [youtu.be/Gim27R5bt1w](https://youtu.be/Gim27R5bt1w)

## Technical Skills

**Languages:** C/C++, Python, Java, JavaScript, TypeScript, Kotlin

**Databases:** PostgreSQL, MySQL, MongoDB

**Frameworks / Libraries:** React.js, Node.js, SpringBoot, OpenCL, OpenCV, NumPy, PyTorch, Matplotlib

**Tools / Technologies:** AWS, CUDA, Apache Spark, Kafka, GNU/Linux, Git, Docker, GitHub Actions