# Bennett R. Wu

Personal info redacted for online version. Please contact me via _LinkedIn_.

_bwu.dev || github.com/bennettrwu || linkedin.com/in/bennettrwu_

## Education

**University of Illinois Urbana Champaign**                                  GPA 3.93 / 4.00
Combined BS‑MCS in Computer Science                                  Aug 2022 ‑ May 2026
- **Coursework**: Algorithms, Artificial Intelligence, Computational Photography, Computer Architecture, Cloud Computing, Cryptography, Database Systems, Data Structures, Distributed Systems, Parallel Programming

## Work Experience

**Amazon**                                                                   Seattle, WA
Software Development Engineer Intern                                  Jun 2025 ‑ Aug 2025
- Designed 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 184 duplicate licenses by migrating Salesforce integration to merged instance
- Advanced new feature development by developing a Kafka consumer to process ad campaign events in a Kotlin SpringBoot application
- Owned projects throughout CI/CD pipeline and ultimately deployed to production
- 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 time from one week to a few minutes for nuclear magnetic resonance spectra analysis through automation with Python scripts
- Ensured seamless machine learning data collection by building web application on AWS for scientists to quickly view and correct machine predictions while generating result report

## Projects

**Focus Stacking**                                          _github.com/bennettrwu/focus‑stacking_
OpenCV, Matplotlib, Python                                            Aug 2023 ‑ Dec 2023
- Developed Python scripts to convert images taken at different focal depths into a depth map and focus stacked image (all parts of image in focus)
- Results found here (warning: bugs): _youtube.com/playlist?list=PL5tZqkyvUAxMxNQaaoXuQU‑cmZYY38q4M_

**NER Extension**                                           _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_

## Technical Skills

**Languages**: C/C++, Python, JavaScript, TypeScript, Java, Kotlin, MySQL, PostgreSQL, MongoDB
**Frameworks**: React.js, Node.js, Express.js, Mocha, Jest, SpringBoot, OpenCL
**Libraries**: OpenCV, NumPy, PyTorch, Tensorflow, Matplotlib
**Technologies**: Git, Docker, Apache Spark, GCP, AWS, Github Actions, Spinnaker, Kafka, GNU/Linux