# Bennett R. Wu

Personal info redacted for online version. Please contact me via <u>LinkedIn</u>. bwu.dev || github.com/bennettrwu || linkedin.com/in/bennettrwu

### **Education**

#### **University of Illinois Urbana Champaign**

GPA 3.95 / 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