

Joshua Silverberg

(734) 263-4322 • joshsilv@umich.edu • github.com/JoshSilverb/ • linkedin.com/in/joshua-silverberg/

EDUCATION

University of Michigan, Ann Arbor

April 2023

- Bachelor of Science and Engineering in Computer Science
- Minors in Mathematics and Applied Statistics
- Cumulative GPA: 3.76/4.00
- Coursework highlights: Web Systems, Machine Learning (Grad), Conversational AI

EXPERIENCE

Software Engineering Intern

May 2022 – July 2022

Bloomberg LP, New York, NY

- Worked on the Fixed Income Core Interfaces team on fixed income ETF price calculation system
- Leveraged proprietary technology to build two full-stack Bloomberg Terminal functions to update and monitor new and expanding distributed price calculation pipeline
- Iteratively improved design based on rounds of stakeholder feedback to prioritize flexibility and scalability
- Ran unit and system tests on functions in all development stages and deployed both projects to production
- Sought out opportunity to build dataset generator for experimental deep learning-based calculation approximation model by automatically collecting select bond market data from internal APIs
- Composed detailed technical design and handoff documentation for each projects' future development

Software Development Engineering Intern

May 2021 – July 2021

Amazon, Seattle, WA

- Worked on the Alexa Brain Metrics and Learning team on utterance rewrite generation pipeline
- Developed secure logging system for evaluation of model functionality in distributed container workflow
- Designed, planned, and built system to securely handle up to 1800 TPS of 5KB confidential logs with negligible latency overhead on critical path
- Documented and presented three designs to engineers and scientists from teams throughout Amazon
- Extended and integrated existing Amazon logging library into rewrite pipeline using Google Guice
- Updated pipeline CDK scripts to automatically deploy required AWS infrastructure (EC2, Route53)

President

May 2022 – Present

Michigan Data Science Team (MDST), Ann Arbor, MI

- Elected to lead largest data science club at Michigan (140+ members)
- Establishing club objectives and vision, managing budget, and working with executive board on fundraising, project planning, outreach, recruiting, and internal affairs
- Leading, planning, and scheduling biweekly board meetings with 5 VPs and 9 committee members
- Initiated MDST corporate partnership program to support members' professional development and diversify club income sources

ML Stock Sentiment Prediction Personal Project

Jan 2021 – Present

https://github.com/JoshSilverb/ssp_ml

- Creating market sentiment prediction program that scrapes recent tweets to classify any stock as bullish, bearish, or neutral with approximately 50% accuracy
- Implemented using custom and out-of-box prediction models from Tensorflow and scikit-learn
- Deploying system to AWS Lambda for managed API access and faster computation

KEY SKILLS

Programming: Bash, C/C++, HTML/CSS, Java, Javascript, Python, SQL, Typescript
Technologies: AWS, CI/CD pipelines, Comdb2, Docker, GCP, Git, Hadoop, Make
Soft Skills: Adaptability, Interpersonal skills, Public speaking, Project management
Languages: English (native), Slovak (fluent), German (conversational)