

Aman Jaiman

COMPUTER SCIENCE · MATHEMATICS

☎ (301) 919-0324 | ✉ amanjaiman@outlook.com | 🌐 www.amanjaiman.github.io | 📷 amanjaiman | 📺 amanjaiman

Education

University of Maryland

College Park, Maryland

MASTER OF SCIENCE IN COMPUTER SCIENCE | BACHELOR OF SCIENCE IN COMPUTER SCIENCE AND MATHEMATICS

Aug 2021 - PRESENT

- Relevant Courses (M.S.): Numerical Methods for Data Science and Machine Learning, Foundation of Deep Learning
- Relevant Courses (B.S.): Intro to Data Science, Algorithms, Intro to Machine Learning, Deep Learning (using PyTorch), Data Structures

Experience

Microsoft

Remote - Clarksburg, Maryland

SOFTWARE ENGINEER INTERN

May 2021 - Aug 2021

- Joined the Azure Kubernetes Service (AKS) infrastructure team. Analyzed underlay cluster creation time and brainstormed techniques to optimize creation time for faster testing and deployment.
- Created a new workflow for deploying new test underlay clusters where total creation time was reduced by nearly 50% and specific tests were reduced by 83%. Added new functionality to the command line including resetting previously deployed clusters, and documentation to make it easier for developers to onboard.
- Intern Podcast: Formed a team to handle production for a new intern podcast at Microsoft: a new way for interns to learn from FTE experiences, and a platform to share that throughout the organization.

Microsoft

Remote - Clarksburg, Maryland

SOFTWARE ENGINEER INTERN

May 2020 - Aug 2020

- Worked with the Azure Kubernetes Service (AKS) team to onboard AKS onto Azure Event Grid so that customers could receive actionable events. Designed and presented the architecture of the service that was needed to onboard.
- Developed an end-to-end service that was responsible for serving HTTP requests from Event Grid using gRPC and protobuf. Integrated the service into the main build and deployment for AKS.
- Created artifacts and documentation that generate code stubs and help with testing. These artifacts can be used by any Azure service that is looking to onboard to Azure Event Grid, cutting down the onboarding time by weeks.
- MS Invent: Formed a team and built a new event where interns can pitch Microsoft product ideas to judges, receive mentorship and feedback, and meet with executives to further their idea.

University of Maryland Institute for Advanced Computer Studies

College Park, Maryland

RESEARCH ASSISTANT

Jan 2020 - May 2020

- Analyzed various transformers used for text generation and completion: GPT-2, HuggingFace ConvAI, DialogPT; to do preliminary testing.
- Fine-tuned existing models on newly collected data on Obama and Trump and wrote generation code to create an automated debate system between bots where a user can act as a moderator.

Applied Information Sciences, Inc (AIS)

Reston, Virginia

SOFTWARE ENGINEER INTERN

Jun 2019 - Aug 2019

- Developed a search term generator for a corpus of news articles using Microsoft Cognitive Services Text Analytics API. The key entities and documents were stored in MongoDB and used in a document search demo application in C# for government agencies.
- Created a console application using a LUIS docker container to demo to government agencies a way to create Question/Answer bots for their internal use.
- Researched the application of machine learning in software development. Built a custom extractor in Kotlin for Cobol and modified the Code2Vec model to classify the extracted code.

EVERFI

Washington D.C.

SOFTWARE ENGINEER INTERN

Jun 2019 - Dec 2019

- Engineered and published a .Net SDK, for the EVERFI RESTful API to help developers interact with and use the API features.
- Tested the SDK by managing University of Kansas student accounts on EVERFI's system.
- Designed and pitched a new course idea to executives to educate high school students about STEM and allow them to make open-minded decisions for their career.
- Attending conferences to learn about SaaS metrics, finance management, and various other business skills.

Skills

Programming Languages

Python, C#, Golang, Java, C, JavaScript, Ruby, OCaml, MATLAB, LaTeX

Libraries & Frameworks

.NET Framework, ASP.NET MVC (with Razor Pages), Django, React, Bootstrap

Machine Learning & Data Science

PyTorch, Pandas, NumPy, scikit-learn, NLTK, Microsoft Cognitive Services

Projects

OWL Standings - www.owlstandings.com

Independent Work

DEVELOPER

2019 - 2021

- Built a web app for the Overwatch League (OWL) community. OWL Standings is an interactive way for users to see which teams will qualify for the upcoming tournament based on the user's predictions of the matches leading up to it.
- Professional OWL team asked me to generate scenarios for them to qualify using the site. They liked it so much they asked for it again in the next tournament cycle. OWL Standings has been really well received by the rest of the community as, and is used by thousands of users around the world.
- The backend for the app use the Django framework with a SQL database. The frontend was developed using Bootstrap and Javascript, using React. Deployment was done using Heroku.

Tweets In Space

HackUMBC

DEVELOPER

2019 - PRESENT

- We reveal insights about tweets and news about any query by showing tweet maps, word clouds, sentiment graphs, and timelines about all tweets and news articles related to that topic.
- Worked with a team to develop a web application built on the Dash framework in Python, using libraries to accomplish data collection and extraction, visualization, and natural language processing.
- Libraries worked with: Dash, Pandas, NumPy, NLTK, Microsoft Cognitive Services, newsapi, TwitterAPI

Exploring Airbnb Prices in New York City

CMSC320 Final Project

DEVELOPER

2019

- Performed end-to-end data analysis of Airbnb data in New York. Determined key indicators of price and developed a regression model to predictor price with those features.
- Libraries worked with: Pandas, NumPy, NLTK, Seaborn and Matplotlib, Plotly, scikit-learn