

# Mileva Van Tuyl

+1-941-914-2675 • [milevavt@gmail.com](mailto:milevavt@gmail.com) • [linkedin.com/in/mileva-van-tuyl/](https://www.linkedin.com/in/mileva-van-tuyl/) • [milevavantuyl.github.io](https://milevavantuyl.github.io)

## SUMMARY

Senior engineer with an M.S. in Data Science and industry experience at the intersection of software and machine learning. Proven experience driving projects to completion through cross-team collaboration with engineers, data scientists, and business folks alike.

## EDUCATION

New College of Florida, M.S. in Applied Data Science, GPA: 4.00/ 4.00

Aug 2021 – Dec 2022

Wellesley College, B.A. Computer Science, GPA: 3.97/ 4.00

Sept 2017 – June 2021

## RELEVANT SKILLS

- Python (FastAPI, Pandas/ NumPy/ SciPy)
- Databases (Postgres, MySQL, MongoDB)
- Machine Learning (scikit-learn, PyTorch, Keras)
- DevOps (Docker, Terraform, Helm, Kubernetes)
- AWS (S3, CloudWatch, Lambda)
- Git (GitHub, GitLab)

## EXPERIENCE

Analog Devices, Senior Software Engineer, Software Engineer

January 2023 - Present

- Designed, implemented, and maintained *Spicelake*, an edge-to-cloud software system delivering data 15x faster and ensuring data integrity (**Python, Postgres, MongoDB, AWS**). Worked with 6+ engineering managers across 4 departments enabling successful project graduation.
- Tech lead for *Wilbur*, a software suite of AI tools advancing market research and guiding our R&D department's initiatives.
- Built end-to-end observability tools for our production-level systems using **Prometheus, Grafana, Terraform, and K8s**.
- Empowered other developers by mentoring junior engineers, running scrum meetings, and sharing knowledge at team "lunch and learns." Also, participated in interview panels resulting in successful hires from intern-level to staff-level engineers.

Minerva Analysis, Data Scientist

June 2020 – December 2022

- Worked with 15+ years of health and behavioral data from diabetics to predict blood glucose levels using **SQL** and **Python**.
- Built web applications and data visualizations to present key data insights to engineers and business leaders (**Flask, Plotly**).

IBM, Data Scientist Intern

May 2022 – August 2022

- Served as an open-source developer on *AI Fairness 360*, a toolkit mitigating discrimination and bias in machine learning models (**R**). Worked with 10 algorithms and 70+ fairness metrics to promote trustworthy AI practices.
- Analyzed enterprise data for the *Cloud Pak Data* platform and presented KPIs to senior management (**Python, IBM Cloud**).

Genospace, Full-Stack Software Engineering Intern

June 2021 – August 2021

- Built data intake tools ingesting health records into Genospace's precision medicine platform (**Vue.JS, Groovy/ Grails**).

MIT Media Lab, Project Co-Lead, Machine Learning Team Lead

May 2020 – January 2021

- Technical lead for *Saving Face*, an open-source COVID-19 technology alerting users if they touched their face.
- Improved machine learning model performance by over 15% and deployed the model in an iOS application using **Swift**.
- Applied statistical and machine learning techniques (including logistic regression, decision trees, and neural networks) to analyze audio data and implement, optimize, and validate machine learning models (**Python, Scikit-learn**).

Cred Lab at Wellesley College, Research Fellow

September 2018 – August 2019

- Scraped and analyzed over 2.5 million tweets and 5000 Google pages using **Python** to study the spread of misinformation.

## PUBLICATIONS AND PRESENTATIONS

A Scalable Solution for Signaling Face Touches to Reduce the Spread of Surface-based Pathogens, **ACM IMWUT**

Mar 2021

Machine Learning for Gesture Recognition to Reduce COVID-19 Transmission, **UMass Amherst**

Feb 2021

"Don't Touch Your Face": A Scalable Mobile Technology to Support the Fight Against COVID-19, **Harvard**

Jan 2021

Detection of methoxymethanol as a photochemistry product of condensed methanol, **MNRAS**

Feb 2019

## AWARDS AND HONORS

Grace Hopper Celebration Scholar (2021) and Speaker (2023)

Oct 2021, Sept 2023

Jacqueline Fowler '49 Public Speaking Prize, Ruhlman Conference, Wellesley College

May 2021

Best Poster Award, Voices of Data Science Conference, UMass Amherst

Feb 2021