

MATTHEW WIDJAJA

<https://wimagine.org/matt>

I am an engineer who spans the entire Data Science stack. I create the data pipelines and the models, so we can ingest and take action on big data. Beyond being a Data Scientist, I leave people better than I found them, by contributing to the team's leadership, education, and culture wherever I go.

SKILLS

- **Programming & Shell:** Python (Primary), C/C++, MATLAB, R, Bash, Csh, Tcsh, Zsh
 - **Python Packages:** Dask, Flask, Jupyter, Matplotlib, Numpy, Pandas, Prodigy, Requests, Scipy
 - **Python Modeling:** Keras, OpenAI, PyTorch, Retro, Scikit-Learn, Spacy, TensorFlow
- **Cloud & Containers:** AWS, Cuda, DigitalOcean, Docker, Kubernetes, Jenkins, MS Azure
- **Data & Storage:** SQL (Primary), SQLite (Primary), AWS DynamoDB, Elasticsearch, Minio, Postgres
- **Models:** Machine Learning, Deep Learning (TimeGAN), NLP, Reinforcement Learning (MA-DDPG0)
- **Teaming & Version Control:** Git (Github & GitLab), Agile (Scrum Master), Jira, MLFlow, Svn

CURRENT EXPERIENCE

Senior Engineer, Lockheed Martin ATL — 2018–Present

- Developed several Data Engineering Python Pipelines to process and clean data for modeling.
- Trained ML and Neural Network models in Python, using an in-house dataset of several hundred participants with wearables and environmental sensors.
- Proposed and led a research project to investigate the effects of cognitive biases in developers.
- Created game-theory models and integrated them in an in-house Docker + Python based pipeline.
- Created a knowledge base of our IT environment to support the team, with hundreds of page views.
- Served as the scrum master on several teams, adapting Agile to best meet each team's needs.
- Was Employee of the Quarter in 2021 for making significant technical and cultural contributions.
- Led a Robotics Workshop for middle schoolers, rewriting its curriculum to meet them on their level.

Rock Database Director, Epic Church — 2021-Present

- Maintains a Microsoft Azure environment to host a SQL based Relationship Management Server.
- Implemented a cloud based check-in platform, operating on SMS, iPads, and Windows devices. Hosted alongside a dynamic web page I created, to help each engage with each guest.
- Managed a team of 4 volunteers & 2 staff members to create tasks, assign tasks, & resolve blockers.

FORMER EXPERIENCE

- Engineer, Lockheed Martin RMS — 2014-2018 (Created automation testing software frameworks)
- Student Web Developer, Stockton University — 2012-2014 (Created responsive webpages)

EDUCATION

- Data Science MS; Stockton University — 2018
- Computational Science BS with Honors and Minor in Math + Biology; Stockton University — 2014

PUBLICATIONS

- Programmatically Identifying Cognitive Biases Present in Software Development — 2021 with LM ATL
- Classifying Fashion MNIST Data — 2017 with Dr. Russ Manson
- Modeling Ecological Networks — 2014 with Dr. Jason Shulman
- Novel Approach to Circuit Analysis — 2014 with Dr. Jason Shulman