

# Thomas J. Pickup

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## Education

**University of Michigan**, Ann Arbor, MI  
*BSE in Computer Science, Minor in Mathematics*

**April 2022**

- GPA: 3.15/4.0
- Related coursework: Computational Theory, Data Structures and Algorithms, Computing for Engineers and Applied Scientists (in Python), Web Development, Machine Learning, Effective Computing, Operating Systems, Deeplearning for computer vision.

## Technical Skills

**Technical Skills:** Python, Java, C++, SQL, JavaScript, CSS, HTML, Django, Flask, git, Tableau, SQL, MongoDB, OOP

**Packages:** Scikit-learn, PyTorch, NumPy, SciPy, Matplotlib, Pandas

## Experience

### ICF

**July 2022 - July 2023**

*Data Analyst*

- *Client: United States Children's Bureau*
  - Used Talend for loading of monthly data files into a PostgreSQL Database feeding a dashboard monitoring the effectiveness of outreach programs.
  - Created a new Talend ETL Jobs written in Java for a new dataset to aggregate event survey data.
- *Client: Military One Source (available at <https://demographics.militaryonesource.mil/>)*
  - Migrated ETL Jobs for enhanced handling of US military demographics data from Talend to Alteryx and created data validation processes that eliminated errors prior to data publication.
  - Consolidated historical datasets into a centralized PostgreSQL database, creating a direct data connection to Tableau, reducing latency by several months.
  - Developed proficiency in Tableau while implementing new client requirements for improved data visualization and long term trend data.
- *ICF Internal: GeoreferencingTeam*
  - Trained and implemented a computer vision model in Python (achieving an 80% accuracy) to detect rooftop solar panels for tax rebate verification.

### Rosalyn.ai

**Summer 2021**

*Jr AI Engineer- Intern*

- Wrote a program to reduce QA time by extracting a 10 second clip corresponding to each instance the model classified as cheating.
- Engineered a heuristic method using pixel change data from frame to frame to trigger model activation, reducing cpu/gpu usage.
- Established a DevOps pipeline for Jira ticket interaction and command-line code deployment.

### Episode 1

**January 2021 - May 2021**

*Venture Capital firm- Data intern*

- Created an automated system that collects KPI information from companies in seed funds.

### Wall Street Webcasting

**Summer 2020**

*Production Engineer*

- Recruited and trained large team (~30 people) of video producers for webcasting virtual seminars.

## Projects Experience

### Extractive Summarization of Meeting Transcript Data

**Winter 2021**

- Developed and trained LDA models on the Wikipedia corpus to model 100 general topics.
- Applied LDA models to segmented meeting data, identifying topic sections in the transcript and utilizing a text summarization algorithm (TextTeaser) to generate meeting summaries.

### GPT Fintech Chatbot

- Leveraged the OpenAI API (GPT3) for advanced natural language processing capabilities in analyzing and retrieving scraped business articles from publications such as Crunchbase, Bloomberg, and Business Insider. Established a MongoDB database for efficient storage and retrieval of the articles, ensuring seamless access and management.
- Employed structural completion feature to automatically populate a database with IPO and seed funding data, including investors.

## Personal Interests

- Chess/Board Games, Soccer, Cooking, Music, Hiking, Snowboarding, Volunteering, SEPI (professional frat)