

# Maximilian C. Wilhelm

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## PROFESSIONAL EXPERIENCE

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### Pratt & Whitney - An RTX Business

*EDSI AL/ML Senior Software Engineer*

**May 2022 – Present**

*West-Hartford, CT*

- AI Work Instruction Assistant – Python, OpenSearch, SageMaker, SGLang
  - RAG architecture to limit hallucinations and serve original documentation
  - OpenSearch Indexes to segregate export restricted data (ITAR)
- Task Tracking Dashboard – Flask, Vue, Jinja, Django, Postgres, 1000+ daily users
  - Rearchitected Django Jinja based application to Vue
  - Integrated a Redis cache for grid data to improve page load times by 460%
  - Utilized AWS SAM to deploy scheduled Lambdas for processing data from external databases
- Finite Element Analysis Visualizer – Vue, Aurora Postgres
  - Optimized queries and redesigned database to improved load time by 2166%
  - Wrote Lambda to parse 4 varieties of FEA software outputs (rst, txt, csv, xlsx) into Json
- Prefect Workflow Orchestration – Python, OpenAPI, Lambda
  - Automatically captured and hosted OpenAPI docs from workflows to further interoperability
- Led organization-wide process transformation that improved task turn around and customer trust
- Receives 4 awards for distinguished contributions
- Scrum Master for a team of 4 software developers

### Computer Projections Inc

*Technology Solutions Intern*

**May 2019 – June 2019**

*Westport, CT*

- Redesign of html-based website to React with brand alignment theme
- Data Center maintenance: swapping failed parts, troubleshooting performance and organizing patch panels

## EDUCATION

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### University of Connecticut

*Bachelors of Science, Computer Science and Engineering*

**May 2023**

*Storrs, CT*

- Concentrations: *Software Engineering* and *Systems and Networks*
- Minor in Mathematics
- GPA 3.8

## SKILLS

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- Advanced Languages: MySQL/Postgres, Python, HTML/CSS, JavaScript, C, C++, Bash
- Frameworks and Libraries: React, Vue, Jinja, Flask, REST API
- Tools: Git, Linux, Docker, AWS, Vim, Matomo, Sentry, Zenhub, Jira
- Certifications: AWS Cloud Practitioner, AWS Developer Associate, Registered Scrum Master

## PROJECTS

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Borderlands Shift Code Auto-Redeemer | Personal | Python, MySQL

- Collected data from scraping database API, integrated into a redemption website utilizing user input credentials, and logged used codes in local MySQL database

Food Truck Ordering system | Senior Project | SQLite, React Native, Node.js

- Hosted a Node.js website on the Wi-Fi hotspot of an Android tablet. Wrote a React Native app enabling chefs to manage orders, and communicate with customers. Automatic performance metrics for food items and chefs.