

# Paith Philemon

[paithmp@gmail.com](mailto:paithmp@gmail.com)

Minneapolis, MN | [Linkedin](#)

*Certified Python Developer with substantial experience in STEM education, computational thinking, and healthcare technologies. Developing products that leverage Artificial Intelligence and Cognitive Architecture to reduce costs, increase revenue, and enhance the well-being of our patients. As a committed STEM advocate, I aim to advance Science, Technology, Engineering, and Mathematics in marginalized communities.*

## EXPERIENCE

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### Ph.D. Student in STEM Education

2024-2028

#### Department of Curriculum and Instruction

My research ensures standards for STEM learning by designing Python models, curricula, decision-making systems, and analytical techniques to create affordable resources. I emphasize technology's role in supporting underrepresented students and promoting educational equity globally through community involvement, social justice, and workforce development. I explore how STEM curricula empower eco-friendly practices in industries like apparel and aim to instill a sustainability culture that benefits students and organizations. Acknowledging that inadequate facilities and resources hinder education for marginalized youth, I use technology and innovative teaching to address these challenges. By leveraging technology, we can implement programmatic changes for sustainable education worldwide. As a STEM advocate, I encourage engagement in science, technology, engineering, and mathematics across diverse communities.

### The Futurist Academy

#### Founder

Jan 2019 - Current

- We leverage the latest in technology and innovative ideas to mold a future of self-empowerment. Explain, Teach, and Inspire the Community
- We are an accelerator platform for educators and future young minds.
- Monthly, we use our STEM Curriculums to teach cognitive thinking through affordable Moving Rainbow LED Strip Kits & more.

### Code Savvy

#### Volunteer Community Engagement Manager

Greater Minneapolis-St. Paul Area  
2023-2024

- Manage the STEM recruiting, onboarding, management, and communication processes with all volunteers for Code Savvy programs with volunteer opportunities, including the Board of Directors and Code Savvy committees.

### Optum Technology

Eden Prairie, Minnesota

#### Assoc Tech Prod Mgr.

July 2021 - June 2024

- Organizing and facilitating daily scrum ceremonies, including program increment planning sessions 5x weekly.
- Creating a continuous learning environment by incorporating feedback from all team members and stakeholders.
- Collaborating with three product owners and a product manager on backlog grooming and refinement to keep the product backlog prioritized and relevant. This ensures that user stories are available for the developers to work on at least two sprints in advance.
- Acting as a technical PO for Rally Governance provides reporting on Rally capabilities that can be viewed holistically at the pillar, leader, and team levels.
- Giving leaders insights on the difference between health information and interoperability and how to measure interoperability within the organization led to better decision-making.

### UnitedHealth Group

Eden Prairie, Minnesota

#### Software Engineer

Aug 2018- Jan 2021

- Storing, retrieving, and manipulating data for the close analysis of image processing database performance across a year.
- Conducting classification models, regression testing, and model demos, analyzed results, and submitted observations to the development team.
- Collaborating with cross-functional development team members to analyze potential system solutions based on evolving organizational requirements. Tested troubleshooting methods, devised innovative solutions, and documented resolutions for inclusion in the knowledge base for the support team.
- This includes multidisciplinary opportunities with data analysis, Python programming, and evaluation of complex systems of people and technology in the healthcare space.

### UnitedHealth Group

Eden Prairie, Minnesota

### Chief of Staff

Aug 2017- July 2018

- Managing special projects across departments, new frameworks, business models, restructuring, and business reviews.
- Developing analytic frameworks, data models, and relevant insights to support prioritization, scoping, and effective decision-making throughout the organization to Influence, facilitate, orchestrate, and provide frameworks and effectively act as the central contact for all business communication.

### University of Minnesota

Minneapolis, Minnesota

#### Research Assistant for Prof. Eugene Park

Aug 2021- Sept 2022

- Programing a Python framework to conceptualize, create front end, back end, deploy, and operate a web application and program the interface for The Kusske Design Initiative (KDI).
- Developing a survey in Qualtrics for a qualitative study sent to 50 providers.

### Coder Dojo

Greater Minneapolis – St. Paul area Minnesota

#### Python Mentor

May 2020 - Present

- Python and Robotics mentor at CoderDojo Twin Cities
- Empowering all twin cities students and educators with the knowledge and skills to create with technology.
- Inclusivity · Diversity · Community · Empowerment · Curiosity · Creativity.

## EDUCATION

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### University of Minnesota – College of Design | Wearable Technology Lab

MINNESOTA

Master of Science – MS, Human Factors & Ergonomics

Aug 2024

M.Sc. Diversity of Views & Experience Fellowship (DOVE)

### Iowa State University - College of Science and Engineering Ivy College of Business

AMES, IA

Bachelor of Science Management Information Systems

May 2017

### Iowa State University - College of Liberal Arts and Science

AMES, IA

Bachelor of Art Medical Illustration

May 2017

## ACADEMIC PROJECT'S AND AWARDS

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### University of Minnesota Dove Research Fellow

MINNESOTA

#### Consultant

Sep-May 2023

- 2021 fellow recipient of the Diversity of Views and Experiences (DOVE) scholarship at the University of Minnesota.
- Community of Scholars Program (COSP) Scholars

## CERTIFICATIONS

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### Udacity Nanodegree

April 2018

Intro to Programming

### Udacity Nanodegree

Jan 2019

Data Analytics

### Udacity Nanodegree

May 2020

Become a Data Scientist

### Udacity Nanodegree

Sept 2020

Machine Learning

### ICAgile

November 2021

Agile Team Facilitation

## SKILLS

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### Business

- Tech Product, Facilitation, Communication, Conflict Resolution, Problem Solving, Agile Coaching, Relationship Building, Workshop Facilitation

#### Technical

- Python, Engineering, Data Analytics, Data Analysis using Excel, SQL and STATA, Microsoft Office Suite, Adobe Creative, CA Agile Central, MS SharePoint, Power BI

#### Languages

- Dinka, Arabic, Swahili, and English

### SPECIAL PROJECTS

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#### Women in Analytics Data Science (WiADS)

Co-led and directed educational sessions for Women in Analytics Data Science (WiADS), an internal organizational group of 500+ members. WiADS is a platform for data science practitioners and enthusiasts to share their knowledge through technical presentations, hands-on workshops, use cases, etc., to create opportunities for members to engage in technical and professional conversations in a positive, supportive, and encouraging environment, create awareness, explore possibilities, and empower them with tools, training, and resources required.

- Women in Analytics Data Science (WiADS) is a yearly organization funded by Optum Technology's CEO. Its goal is to amplify diverse backgrounds in Data Science by leveraging contributions from teams and organizations.
- Delivering and pitching our organization 4x a week with a list of specific objectives and sharing invaluable insights to stakeholders on the impacts of the audience.
- Pre-planned and curated a rolling list of 50 + Technologies, Stakeholders, Owners, Sponsors, Team Members, Project Managers, etc. With their interests, estimated project impacts, and estimated priority to the company.
- From 2019-2023, five slide decks will be created monthly to show the information related to stakeholders, including their requirements, impacts, and interests related to subject matter experts.

#### ATC SOAP NOTES Role as Tech Lead

ATC Project on Workbasket Optimization team who created ML solution to make recommendations of potential gaps within Assessment & Plan that can eliminate the need for the clinician to manually construct. Clinicians cannot document the structured assessment directly while at the home visit without negatively impacting the experience and flow of the visit with the member.

In addition, the Workbasket Optimization team used the solution to review historical assessments and identify missing gaps that needed to be addressed to clean up documentation retroactively and complete audits of documentation practices.

- Business Value:
- Forecasted Annual Run-Rate Savings: \$7,948,718 (under review currently) •Reduction in Stars Gap Closures leading to a reduced risk in corrective actions. •Better Member Experience

#### ATC Targeted OCR Role as Tech Lead

ATC Project, where the Workbasket Optimization team worked on a successful platform, allowing users to pick from a list of known templates to process and run targeted OCR on their documents.

- We also have the option to run classification on their documents to identify known templates automatically.
- Users can upload their scripts and classification models to the platform to handle their template type.
- The current targeted-ocr engine can swap between scripts that handle different template forms. Within these scripts, you can specify regions of interest, which image-processing tasks to run, which classification models to run, and so on.

#### ATC AIML Lehigh Valley Health Network (LVHN) Project Role as Tech Lead

ATC AIML summer Project with a group of interns working on a project to pilot Optum's capabilities in emerging technology in serving the communities the Lehigh Valley Health Network (LVHN) serves. LVHN is an Optum client and will be working with us. LVHN is an essential customer of Optum's products.

I worked on a team with other software development interns on a project involving social determinants of health. When you think of health, you usually think of factors such as blood pressure, but we were focusing on social aspects such as income level, education, and geographic location. Generally, for example, those of lower income may face higher risks of developing adverse health outcomes.

## **ATC Image Processing Platform (IPP) Role as Software Engineer**

ATC Project on the Workbasket Optimization team is creating an Image Processing Platform (IPP) to generate business value from documents and images, which is a better way to leverage data elements for the future. In UHG|Optum, we receive hundreds of thousands of files in the form of medical records, claims, etc. Each contains valuable information that is often hard to extract, and extracting addresses from text is a complex problem.

- The address has a different format (Standard US addresses are an exception)
- People may write address differently (e.g., West Quay vs. W. Quay)
- People can write address elements differently (e.g., one vs. 1)
- The position of the address element can also be different, etc.

Extracting addresses from text is a complex problem, and as a team, we examined several open-source frameworks that deal with addresses. The team found a parser-based solution that works well with reasonable accuracy and speed. We have explored PyAp, address, and extract addresses from the text, which was a complex problem, and we have examined several open-source frameworks that deal with addresses.

As one of the developers on the team, we implemented a spellchecker package called SymSpell. It was the best option since it supports both word segmentation and joining. With pre-and post-processing of the data that we send to the auto-text corrector to ensure we avoid some of the issues with the library. Helping find a spell checker parser-based solution that works well with reasonable accuracy and speed.

