Peter N. Dobbs

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EDUCATION

Master of Science, Computational Sciences — GPA: 3.7/4
Marquette University Graduate School, Milwaukee, WI, expected May 2020

Bachelor of Science, Biomedical Engineering - Biocomputing — GPA: 3.5/4
Marquette University Opus College of Engineering, Milwaukee, WI, May 2018

COMPUTER SPECIALTIES

Languages: C#, C, Python, R, SQL, HTML/PHP
Concepts: CI/CD, Agile, REST, Deon Ethical Checklist, Requirements Engineering
Technologies: Git, Jira, TeamCity, Crucible, Trello
Platforms: Windows, Linux, AWS, Azure, MicroC/OS-II
Standards Practiced: HL7, DICOM, IHE

PROFESSIONAL EXPERIENCE

Product Owner and DevOps Engineer — October 2018 - present
Marquette Energy Analytics, LLC, Milwaukee, WI

- Deploying regular updates for forecasting models on Azure
- Product owner for the GasDay Toolkit, an Excel COM Add-In that helps our customers analyze data and generate preconfigured reports on-demand.
- Primary contact for licensed products at five of our customer sites.
- Iteratively improving processes for data analytics and quality assurance

Application Support Specialist — June 2015 - October 2018
GasDay Project at Marquette University, Milwaukee, WI

- Deployed regular updates to the energy demand forecasting AI models.
- Developed automation tools that decreased deployment time by 20%.
- Led process improvement for product testing and hand-offs

FEATURED PROJECTS

EMR6050: Web Solution for an Urban Mental Health Clinic
Created a suite of cloud-based tools to meet the technical needs of a new behavioral health clinic. All instances and data are hosted on AWS. This project is on-going as a part of my Master's thesis project.

Team Great Lakes - Team Lead
Competed with a group of students from Milwaukee and Chicago in the Society of Imaging Informatics in Medicine (SIIM) Hackathon at the 2018 and 2019 SIIM Annual Meeting. As Team Lead, I was directly involved in the requirements gathering or development for the following projects:

- `Follow-up of Noncritical Actionable Findings` (2019) - automated notification of primary care providers that important findings which are not critical for patient intervention at the time of the study are contained in radiology study. *This project placed 3rd at the 2019 SIIM Hackathon.*
- `Forms on FHIR` (2019) - provides a UI for directly creating and editing FHIR resources for populating an AI-ready research FHIR server.
- `Synoptic Reporting as an Enabler` (2018) - converts a synoptic (structured and coded) radiology report into a FHIR resource for storage in a FHIR server.

Assessment of Public Service Accessibility in Milwaukee
Using various open data sets for Milwaukee, WI and GIS shape files, this project qualified a relationship between adjusted gross income and calls for Emergency Medical Services (both in aggregate and in particular instances related to medical services) in different areas of Milwaukee. While investigating the topic, the deon data science ethical checklist was applied as a way to assess the implications of these findings.

WORLDLY EXPERIENCE

ENGINEERING WORLD HEALTH - SUMMER INSTITUTE

On the Ground Coordinator - Uganda 2018

- Instructed a mixed cohort of students from the Duke Engage program and 5 top-ranked Makerere University engineering students.
- Coordinated training and cultural experiences with Ugandan partners in Central and Eastern Uganda.

On the Ground Coordinator - Rwanda 2017

- Improved teaching materials for the 4 week in-country device repair and design in constrained environments course; TA'd the 4 week in-country course.
- Supervised and assisted the participants at their placement hospitals throughout rural Rwanda.
- Compiled reports on all placement sites that included an equipment inventory, equipment service report, and a final presentation of work and experiences from each of the participant groups.

Volunteer Biomedical Equiment Technician (BMET) - Rwanda 2016

- Spent 4 weeks studying medical device repair and design in constrained environments at IPRC in Kigali, Rwanda.
- Worked for 5 weeks in a BMET workshop in rural Rwanda, inventorying over 340 pieces of equipment and achieving a repair success rate of 74%, the best success rate of the program.

EXTRA-CURRICULAR ACTIVITIES

Marquette Birdhouse - Primary D-Line Handler — Fall 2016 - present
Playing for Marquette's D1 Ultimate Frisbee team. Fostering a fun but competitive atmosphere for developing student-athletes. We have reached the regional-level tournament in each season I have played.

Milwaukee Revival - Captain, Handler — Summer 2019 - present
Captained a summer club Ultimate team through its inaugural season. Developed positive relationships between players within the Milwaukee Ultimate Community who also play on rival college teams.

Marquette University Core Band - Drums & Percussion — Fall 2014 - Spring 2017
Exceeded the required attendance by playing at over 50% of all pep-band assigned events, including pep rallies and home volleyball and basketball games. Travelled with the Marquette Basketball and Volleyball teams to perform at various post-season tournaments. My favorite moment was getting to play in Madison Square Garden.

REFERENCES

available upon request