

Derek Chapman

Data Scientist

(240) 274-6968

derekachapman@gmail.com

derekachapman.com

www.linkedin.com/in/dchapman-uiuc

Education

University of Illinois at Urbana-Champaign (UIUC)

- Master's of Computer Science in Data Science (MCS-DS)
- Graduated December 2021 with GPA of 4.0
- Coursework in: Statistics, Data Mining (Patterns), Text Mining, Deep Learning, Statistical Learning, Computer Vision, Data Visualization
- Additional classes through University of Michigan and John Hopkins University in Pandas, Numpy, Data Visualization

Work Experience

Technology Coordinator - *Wahiawa Middle School* - June 2015 to Present

- Increased devices in student hands by 650% in 15 months.
- Created a ticket tracking system that helped reduced wait times by an estimated 90% in 6 months.
- Spearheaded a new email system with voluntary adoption that grew to include 86% of staff within 24 months.
- Setup / sole manager of **950 user** Google Apps **domain**
- Other duties included direct support/repair, purchasing, asset management, and advising the school's leadership.

Special Education Teacher - 2003 to May 2015

- **Head of 32-person** department for 4 years

Recent Projects

Sepsis Prediction Model Creation - Deep Learning for Health Care

- Created a state-of-the-art **LSTM Deep Learning** model to predict Sepsis in ER patients far earlier than standard clinical tools.
- Cleaned / organized MIMIC-III dataset using Numpy, Pandas, and file streaming.
- Liaison between team members in four different time zones. Led **team coordination** and work integration via Google Colab and GitHub.

Predicting Health Inspection Scores

- Created custom algorithms to use large datasets to predict on restaurant hygiene.
- Incorporated: Sentiment Analysis, Doc2Vec, Classification using **Linear Regression and Random Forest**, data cleaning, multiple large datasets.

Out of Order Book Finder

- Built an autonomous vehicle that incorporated Obstacle Avoidance, **Computer Vision**, and a connection to our AWS instance for front end reporting.
- Used **OpenCV and Pytesseract** to find and read labels from book spines.

Additional Experience

Presenter/Trainer

- Google Apps, Cyber Security, New Staff Trainings, Education Law/Regulations.
- Created/managed full day camp with a dozen presenters and vendors for entire school staff.

Certified Google Apps Administrator

Licensed teacher in Special Education / Social Studies (12 years classroom experience)