Anthony L Chen

18561 63rd Ave. N Maple Grove, MN 55311
(763) 412-0821
achen@anthonylchen.com

Education

University of Minnesota, Twin Cities, MN
Bachelor of Science in Computer Science, graduation in May 2019.
Minor in Statistics
GPA: 3.87/4.0
Specialized Track: Artificial Intelligence & Big Data

Skills

- Programming Languages: C, C++, JAVA, Clojure, Python, HTML, JavaScript, Unix Shell, LaTex, R
- Operating Systems: Windows , Unix/Linux, macOS Sierra
- Big Data & Analytics: Hadoop, HBase, Hive
- Network Technology: TCP/IP, LAN/WAN
- IDE/Text Editors: Eclipse, Code::Blocks, PyCharm, Atom, Geany, Android Studio, MATLAB, Notepad++
- Tools: Git (VCS)

Working Experiences

Machine Learning Engineer Intern, Eden Prairie MN **Optum/UnitedHealth Group** 06/2018-Present

- Summer Project on Provider Fraud Detection using AI/ML
- Developed a Graph Database for storing Provider information under customized schema
- Wrote automated queries that run social network analysis algorithms that measure the amount of risk
- Risk Factors are stored in Table that is reordered and weighted with Reinforced Learning through a built UI
- Built an Image Recognition Classifier that assists in detecting fraud. Details are limited as it is under patent review.

Swarm Robotics Research Assistant, Minneapolis MN **University of Minnesota**02/2018-Present

- Worked on Swarm Robotics project under John Harwell and Professor Maria Gini
- Wrote code to test and measure the robustness & flexibility of a swarm robots in different environments.
- Working on own project about a new way of energy efficiency maximization with large swarms of robots.
- Simulated under ARGoS in C++.

Teaching Assistant, Minneapolis MN **University of Minnesota**01/2018-Present

- Assisted in the Machine Architecture & Org class (CSCI 2021)
- Lead weekly discussions on computer architecture concepts and code
- Proctored midterms as well as graded projects/exams
- Held weekly office hours to assist students one on one,

Computer Vision Research Assistant, Minneapolis MN **University of Minnesota** 09/2017-Present

- Visual Question and Answering Research Project in Visual Attention
- Use combination of Recurrent Neural Networks for Natural Language Processing and Convolutional Neural Network and Capsule Neural Network for Image Recognition
- Goal was to simulate an AI that could answer questions about a given image.
- Funded by Undergraduate Research Scholarship
- Under Computer Vision and Machine Learning Professor Qi Zhao

Big Data Software Engineer Intern, Minnetonka, MN **Optum/UnitedHealth Group** 06/2017-08/2017

- Assisted in Data Lake DevOps Team for Optum's Big Data Platform
- Wrote Transporter/Timestamp Bash Scripts to measure and improve the ingestion time of incoming data in the data lake
- Design and wrote Java Code for creating a new dashboard monitor for the Data Lake. Purpose of program was to visually display the ingestion progress of data files and be able to email/notify the appropriate team to fix a process if the ingestion time took over 10 minutes.
- Wrote Hive Queries to analyze the volume, velocity, and variety of data in the Data Lake.
- Worked with a group of interns on an automation team to design an automation regression framework for improving time, enhance quality, and promote reusability within their Data Fabric 2.0. (Design included detailed logic diagram, collaboration diagram, referential integrity diagram, sequence diagram, etc.)
- Manipulated and transferred HBase tables connected into database through JDBC into a table on a dashboard

Instructor, Plymouth/Eden Prairie, MN **Center for Academic Excellence** 07/2015 – 08/2015

- I taught elementary students the basic concept of computer science and programming.

Awards

- National Merit Finalist
- AP Scholar Award with Distinction
- Gold Scholar Award Scholarship
- Presidential Scholarship
- Tau Beta Pi Member
- Undergraduate Research Scholarship
- Website Design Team National 3rd Place BPA
- JAVA Programming State Finalist BPA
- C++ Programming State Finalist BPA

References

Available upon request