

EDUCATION

Chalmers University of Technology, Gothenburg, Sweden
 M.Sc. Complex Adaptive Systems – Data Science track
Full-tuition Scholarship via *US Friends of Chalmers*

Aug 2020 – June 2022

Texas A&M University, College Station, TX
 B.S. Industrial Engineering (*magna cum laude*)
Major GPA: 3.87 Cumulative GPA: 3.77
 Nominated as Finalist for *Most Outstanding Departmental Senior* (top 5 graduates)

Dec 2017

INDUSTRY EXPERIENCE

Apple Inc. via **Wipro Ltd.** – San Jose, CA

Site Reliability Engineer

Sep 2018 – Jul 2020

- Recognized as a Role Model at annual company conference
- Maintained Kafka/Zookeeper and Redis clusters (400+ nodes)
- Built automated log analysis tool to identify responsible team for data build errors
- Predicted cluster utilization for FY planning using timeseries data (Python pandas, numPy)
- Became go-to Splunk expert (power user) to manage dashboards, alerts, and lookups across teams
- Diagnosed slow and failed Hadoop and Spark jobs, wrote many Python automation scripts w/ internal/external APIs

RESEARCH and ACADEMIC EXPERIENCE

Academic Papers and Projects

Text Generation and Information Correlation of Online Discourse (available [here](#))

Feb 2021 – present

- Investigated changes in correlation information at various lengths before, during, and after the r/WallstreetBets forum exploded in popularity, as well as generated some sample comments via a Markov Chain

A Critical Analysis of an Ant Excavation Model (available [here](#))

Oct 2020 – Jan 2021

- Implemented existing ant colony model and raised new evidence to support a claim about the model's mechanisms and to question its plenitude

Simulation Crowd Management (available [here](#))

May 2017 – Aug 2017

- Implemented several crowd models from literature and tuned parameters to reflect empirical data
- Quantified model performance and identified problematic situations for each model

Complexity Working Group – Bay Area, CA

Apr 2018 – Oct 2018

Independent Researcher

- Joined up with several [Complexity Weekend](#) hackathon founders to form an independent research group and applied for a DARPA grant to investigate a top-down causal model for physiology using time-series data (available [here](#))

Industrial & Systems Engineering Dept. – Dwight Look College of Engineering, TAMU

Peer Teacher Assistant

Aug 2016 – Dec 2017

- Aided professors in teaching Visual Basic for Applications
- Independently designed and held exam review sessions, graded homework/proctored exams, held weekly office hours

NOTABLE COURSES by May 2021

Artificial Neural Networks

Advanced Neural Networks

Financial Time-Series

Dynamical Systems

Simulation of Complex Systems

Computational Biology

Stochastic Optimization Algorithms

Operations Research (linear & stochastic)

Information Theory for Complex Systems

RELEVANT SKILLS

Programming languages: Python, R, VBA, MATLAB, C++, Bash, SQL

Distributed systems & technologies: Hadoop, Kafka, Redis, Splunk