

# Kirk Easterson

+47 484 00 835 ♦ kirk.easterson@gmail.com ♦ kirkeasterson.com ♦ github.com/kirkeasterson ♦ linkedin.com/in/kirkeasterson

## Education

### KTH Royal Institute of Technology

*Masters of Science - Computer Science: Machine Learning Specialization*

STOCKHOLM, SWEDEN

Aug 2019 – Dec 2021

### Stony Brook University

*Non-Matriculated Graduate Student*

NEW YORK, USA

May 2017 – May 2019

### State University of New York at Fredonia

*Bachelors of Arts – Applied Music*

NEW YORK, USA

Aug 2012 – May 2015

## Skills

**Languages:** Golang, C#, F#, Python, Javascript, Typescript, Java, SQL, Bash

**Tools:** Git, BigQuery, Elastic Search, Google Colab, Ansible, React, PostgreSQL, MongoDB, TeamCity, GoReplay, Mailgun, jQuery

## Experience

### Unacast – Backend software engineer

Mar 2022 – present

- Build and maintain the data catalog using Golang with PostgreSQL and BigQuery
- Build and maintain the internal and external GRPC APIs using golang, and the python client that is a GRPC wrapper
- Index data to the catalog using Google Colab and Python3

### Loop54 – Full stack developer

Mar 2020 – Mar 2022

- Designed and built large portion of customer portal. Frontend: *Fable(F#)* with *Ant Design* library, backend: C# with PostgreSQL and MongoDB
- Built internal tools in C# for Product Specialists to process customer product information
- Wrote various bash scripts for git hooks and capturing network traffic

### Saab AB – Masters Thesis

May 2021 – Dec 2021

- Built tool in *Python* to automate testing for open-source software defined networking tool *P4*
- Implements *Microsoft's* open-source tool *PICT* to generate and run combinatorial test cases
- Implements *Packet Test Framework* (PTF) to run the test cases
- Work continued from Research Assistant position at KTH (*see below*)

### KTH – Research Assistant

Mar 2020 – Mar 2021

- Partnership with KTH and Saab AB to capture network traffic in open-source software defined networking tool *P4*
- Built with *Python* using the Observer design pattern

### Maharam – Applications Engineer Intern

Mar 2019 – Aug 2019

- Wrote over 3,000 lines of Java and BBJ to assist with data migration to SQL Server
- Rewrote original code to reduce overnight push time from 12 hours for 10 tables to 8 hours for over 750 tables

### The Paramount – Stage Manager

May 2015 – May 2019

- Stage-managed over 100 acts in a 1,500 seat entertainment venue
- Worked for artists such as The Beach Boys, Fergie, Joe Jonas, Weird Al, and Meatloaf

### The Town Pants – Musician (Upright Bass & Piano)

May 2014 – May 2017

- Toured in an internationally established Irish folk band
- Played with musicians such as Zac Brown, Cory Henry, and George Millar

## Projects

### KALE (Kirk's Automated Linux Environment) – Ansible

Dec 2021 – present

- Automated installation of my linux environment on Ubuntu Server 22.04
- <https://github.com/KirkEasterson/kale>

### .dotfiles

Dec 2019 – present

- Various dotfiles for programs I use on a daily basis
- <https://github.com/KirkEasterson/.dotfiles>

### Duckhunt AI – Java

Aug 2019 – Sep 2019

- Designed an artificial intelligence to play Duckhunt
- Used Hidden Markov Models to predict location and species of duck

### Segregated Freelist Memory Manager – C

Nov 2018 – Dec 2018

- Dynamic memory allocator for the x86-64 architecture
- Emulates C standard library functions `malloc`, `realloc`, and `free`
- Features best-fit placement policy and immediate coalescing on `free` with adjacent free blocks.

### SBUScript – PLY(Python, Lex, Yacc)

June 2018 – July 2018

- Built a complete compiler for Java
- Extensive use of the PLY parser generator