

Kirk Easterson

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kirkeasterson.com



github.com/kirkeasterson

Education

KTH Royal Institute of Technology
Masters of Science - Computer Science

STOCKHOLM, SWEDEN
Aug 2019 – Jun 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

MIT Experimental Learning
Certificate Course: Big Data and Social Analytics

MASSACHUSETTS, USA
May 2016 – Aug 2016

Experience

Maharam – *Applications Engineer Intern*

Mar 2019 – Aug 2019

- Wrote Java to assist with data migration from BBj to SQL Server
- Rewrote original code to achieve 6 times more efficient data transfer

Freelance – *Programmer*

Sep 2018 – Nov 2018

- Reformatted over 4,000 lines of Python data science modules into Cython
- Implemented contiguous memoryviews to improve efficiency in accessing NumPy arrays

Gentoo Linux – *Translator*

May 2018 – present

- Contributed to an open source, volunteer-driven Linux distribution
- Translated over 50 pages of documentation and handbook into Swedish and Norwegian

Fire Rescue Systems – *Software Engineer Intern*

May 2017 – August 2017

- Wrote code and documentation for C++ and Java
- Maintained code for emergency-response dispatch software used throughout Suffolk and Nassau county
- Gained professional experience with Git

The Paramount – *Stage Manager*

May 2015 – May 2019

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

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

May 2014 – May 2017

- Toured in an internationally established Irish folk band
- Performed in places such as Dublin, Edinburgh, London, New York City, Hawaii, Quebec, and Vancouver
- Played with musicians such as Zac Brown, Cory Henry, and George Millar

Projects

Multi-Threaded Transactional Object Store Database – C

Nov 2018 – Dec 2018

- Use of POSIX threads and multi-threading safety
- Attained concurrency guarantees with use of semaphores, mutexes, and proper thread execution
- Handled host-to-many-client connection with low-level socket programming

Vendor – *Java, JDBC, and MySQL*

Nov 2018 – Dec 2018

- Created a full-stack web app for an online auction house
- Fully functioning website similar to eBay where users can buy or sell items

RUDP – *Python*

September 2018 – October 2018

- Wrote a reliable user datagram protocol implementation
- Heavy use of the Python socket library
- Features 2-way file sharing and simulated packet loss

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

Skills

Languages: Python, MySQL, Java, Javascript(React), C/C++, Bash, CSS, HTML, Prolog, SML, \LaTeX , LISP, MIPS

Tools: Git, Tableau, SQL Server Management Studio, Jupyter, AWS, Pro Tools, Ableton, Photoshop, Blender, VMware

Natural languages: English (*native speaker*), Swedish (*limited working proficiency*), Norwegian (*limited working proficiency*)