Daniel Cartwright

Work Experience

2017–Present **Programmer**, *Layer 3 Communications*.
Working on problems in network security with `Haskell` and `Nix`.

Activities

2016– **Hobby**, *Open Source Programming*.
diet - First complete design and implementation of Discrete Interval Encoding Trees for compact, efficient storage/lookup of enumerable data, in Haskell
silvi - Haskell library for generating fake data
freq - Cryptanalytic frequency analysis tool used to score domain names by validity
Ameybot - Fork of GNU Go, an engine for The Game of Go that I ran on The Computer Go Server as well as The Kiseido Go Server. Made adjustments to move generation and made additions to the shapes database resulting in roughly 100 ELO increase in playing strength.

2010–2014 **Club**, *University Interscholastic League - STEM*, Member.
Academic competitions organised by the University of Texas at Austin.
Participated in Mathematics, Computer Science.
Calculator Applications, Number Sense, Science, and Placed State in 2011, Regionals in 2012, 2013, and 2014.

Skills

Programming `Haskell, Rust`
Software Linux (2 yrs), git
Other Vim, LaTeX, NixOS