# Brandon Koepke | Alpha Architect

1055 Walidie Court - Kelowna, BC V1Y 9P8

☐ (206) 822-1625 • **\( \)** (250) 878-4414 • ☐ brandon@finitemoment.com • **in** bdkoepke • ☐ bdkoepke

## **Summary**

Computer Systems Analyst with a demonstrated history of working in the investment management industry.

- o Automated trading workflows for ETFs, SMAs, a managed futures hedge fund, and institutional accounts at Alpha Architect. Built several portfolio analysis and data warehousing tools.
- o Part of a team of eight who were formally recognized at the bi-annual Amazon Web Services all-hands meeting for saving the company \$250 million dollars.
- o Independently completed a project at Disney which saved the company \$200 thousand dollars a year in perpetuity.
- o Earned two degrees while simultaneously working as the lead developer of Onstream Pipeline Inspection.
- o Worked in almost every role at my fathers boat business from age twelve until University.

# **EDUCATION**

## Passed all three levels of the CFA Program

CFA Institute

2016-

#### **Bachelor of Commerce in Finance**

University of Calgary

**Calgary, AB** 2007–2013

Bachelor of Science in Computer Science, specialization in Software Engineering

University of Calgary

**Calgary, AB** 2007–2013

## EXPERIENCE

VOCATIONAL.

#### Alpha Architect

Computer Systems Analyst

October 2017 -

- o Built a custom ETL for databasing trading and ETF portfolio data; the system processes hundreds of files a day.
- o Created oData API that exposes the database API.
- o Migrated all trading workflows from manual copying and VBA to Power Query; most data is now fetched via the API.
- o Built post-processing data pipelines for analytical tools.

#### **Strawhouse Labs**

Senior Software Developer

January 2017 - September 2017

- o Developed an experimentation and template creation engine for maximizing affiliate marketing revenue.
- o Redesigned a system for automating advertising copy generation greatly reducing time to market.

## Amazon

Software Engineer

October 2015 - January 2017

- o Designed and implemented a system for selecting racks with the highest cost benefit ratio for retirement.
- o Obviated four full-time roles by automating capacity setting for instance migrations and evictions.

o Worked with multiple teams to develop a fixed host retirement API greatly improving customer experience.

#### **Disney Interactive**

Software Developer

*January 2015 - October 2015* 

- o Lead maintainer of Disney's Club Penguin asset pipeline and production environment.
- o Disclosed and resolved a major vulnerability exposing thousands of credentials and personal data.

#### **Disney Interactive**

Associate Software Developer

May 2014 - January 2015

- o Presented container platform research at a conference in Los-Angeles.
- o Significantly reduced operational burden by migrating pre-production servers to container platforms.

#### **Solium Financial**

Software Developer

Summer 2013

- o Worked on a cloud platform for employee stock option plan administration.
- o Added additional variables to the fee engine (a domain specific language for specifying fees to be paid on option exercise) for non-qualified stock options.
- o Added versioning and a user interface for employee blackout period management.

## **Onstream Pipeline Inspection**

*Software Developer* 

Summer 2011-Summer 2012

- o Developed a rich client for high resolution pipeline analysis and an Excel extension for report generation.
- o Enabled the real-time visualization of over 7 billion points by modifying the OxyPlot library to use dynamic downsampling.
- o Developed an algorithm and test suite for automatically finding metal loss in pipelines. Over 400GB of data was used in the evaluation process. The resulting algorithm found 90% of metal loss with 5% false positives.

#### Rayburns Marine World

Multiple roles

Summer 2003-Summer 2010

- o Worked in reception (phone, filing, etc), shop hand (anything that needed to be done), cleaning boats (including acid washes, detailing, etc), part sales (direct customers, internal service customers, and inventory management), and accounting (financial statement generation, auditing, etc).
- o Managed Windows workstations, Windows and Linux servers, and network hardware.

## Programming Languages

Proficient: C, C#, F#, Java, JavaScript, LATEX, Ruby, SML Familiar with: C++, F\*, Haskell, OCaml, Python,

Scheme

## COMPUTER SKILLS

Programs: Microsoft Office Suite, Bloomberg Termi- Operating Systems: Windows, Mac OS X, Linux nal, Thompson-Reuters, Interactive Brokers.