

# Cason Wight

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## Technical Skills

Languages: R, Python, SQL, with prior experience in VBA, SAS, and C++ (exposure to Hadoop, Spark, and Hive)  
Statistical/machine learning: advanced regression, cluster and multivariate analysis, deep learning, among others  
Technologies: Tidyverse, Pandas, GGplot, Stan, Sklearn, and basic TensorFlow (exposure to h2o and Databricks)

## Experience

**Xandr** (Warner Media Company), Portland OR May 2020 – Aug 2020  
Data Science Intern

- Constructed an algorithm that estimates theoretical optimal price floors in advertisement auctions
- Used algorithm to run a weeklong experiment on bidder reactions to price floors (14 mil. impressions)
- Wrote a statistical analysis that was presented to the data science team, executives, and clients
- Analysis will continue to be used for next steps in research, potentially leading to 5% revenue gains

**Cigna**, Hartford CT May 2019 – Aug 2019  
Data Analyst Intern (Actuary in Healthcare)

- Created a batch rating tool that priced hundreds of health plans simultaneously, using the prior rating engine
- Produced a pricing study on the vision product using batch rating tool
- Presented suggestions that could lead to an estimated 5% profit increase (used in pricing update)

**Oliver Wyman**, Atlanta GA May 2018 – Aug 2018  
Data Analyst Intern (Actuary in Property and Casualty)

- Led a risk analysis study from client data to final reports, presented to the client as a formal document
- Evaluated dozens of risk studies for correctness and completeness, often leading to material changes

## Published Research

Error Bounds for Convolutions via the Discrete Fourier Transform Nov 2017 – Apr 2019

- Developed error bounds for numerical convolutions of probability distributions using Fourier Transform
- Method reduces calculation time by up to 99% and enables selection of maximum allowable error
- Co-authored a paper [published](#) by Methodology and Computing in Applied Probability, Sep 2019

Auto Loss Costs Nov 2017 – Jan 2018

- Led analysis for three auto coverages through random forest models and regression analysis in R
- Developed a written report, published by the [SOA](#) and [CAS](#); presented at 2018 CAS Annual Meeting

## Research in Development

Chronic Kidney Disease (CKD) Progression and Costs Sep 2019 – Present

- Modeling the progression and costs associated with kidney disease using discrete Markov models
- Creating a predictive model for costs of a CKD patient, using large data sources to assess key drivers

Inference for semi-Markov Models with Panel Data Jan 2019 – Present

- Developing solutions for semi-Markov models with panel data using maximum likelihood estimation
- Proposed method may reduce calculation time by over 80% while increasing accuracy

## Education

Brigham Young University, Provo, UT Sep 2016 – Apr 2021

M.S. – Statistics (3.90 GPA)

B.S. – Actuarial Science (4.00 GPA)

## Achievements

Case Competitions Won: Domo Data Analytics (BYU, 2020) and CAS Data Visualization (ASU, 2019)

BYU Student Research Conference session winner (2018 and 2020)

Scholarships: BYU academic, CAS Trust, Intel's Andy Grove, BYU Statistics Department

Fluent in Spanish

Eagle scout