

CHRISTOPHER HENSON

chenson@aggienetwork.com • <https://chrishenson.net/>
<https://github.com/chenson2018> • <https://www.linkedin.com/in/christopher-henson> • (936) 355-8886

EDUCATION

The University of Texas at Austin	Master of Science in Business Analytics Cumulative GPA: 3.63 McCombs School of Business Academic Excellence Award recipient	May 2020
Texas A&M University	Bachelor of Arts, Mathematics (minor in Cybersecurity)	May 2018

EXPERIENCE

Bank of America – <i>Assistant VP, Financial Engineering</i> ; Atlanta, GA	August 2020 - present
<ul style="list-style-type: none">• Developed and maintained Quantitative Finance’s valuation tools for an \$800BB fixed income portfolio• Created an automated daily calculation and monitoring system for attribution of bank-wide changes in liquidity ratios• As part of the LIBOR transition, redesigned model and code for yield curve PCA and interest rate scenarios for MTM instruments• Designed custom CI/CD for integrating in-house package builds and web application deployments and dependencies• Developed Azure pipelines for R, Perl and Python for automatic unit testing, code coverage, and documentation generation• Created an API wrapper and automated templating system for Ongoing Monitoring Reports of model risk metrics	
Walmart – <i>Business Analytics Capstone</i> ; Austin, TX	Spring 2020
<ul style="list-style-type: none">• Programmatically compiled publicly available reports (SEC filings, Proxy Statements, Earnings call transcripts, etc.)• Utilized NLP and time series methodologies to model trends in topics across competitors for a ten-year period• Developed a regression model that connected topic modelling results and financial metrics for Walmart and competitors	

NONPROFIT WORK

College Advising Corps – <i>College Adviser</i> ; Houston, TX	July 2018 – June 2019
<ul style="list-style-type: none">• Direct advisor to over 700 high school seniors, primarily from low-income and underrepresented backgrounds• Designed a website and database to automatically generate college recommendations for high school seniors• Lead a workshop at a national conference (approximately 1000 attendees) on utilizing technology in college admissions	
Jack Kent Cooke Foundation – <i>Application Reviewer</i> ; Houston, TX	October 2018 – January 2019
<ul style="list-style-type: none">• Reviewed applications for the Cooke Foundation’s College Scholarship Program in committee-based evaluation of candidates	

ACADEMIC PROJECTS/COMPETITIONS

American Sign Langue Gesture Recognition	Fall 2019
<ul style="list-style-type: none">• Created a predictive model that classified from a corpus of 60 ASL signs recorded with a motion capture device (Leap Motion)• Using Linear Discriminant Analysis on a set of engineered features, achieved an average accuracy of 80 – 89%	
Humana Mays Healthcare Case Competition	Fall 2019
<ul style="list-style-type: none">• Finalist team, ranking top five out of over 400 submissions from graduate-level students• Built an ensemble model (gradient boosting/random forest) to identify patients at risk for opioid addiction with .92 AUC-ROC• Implemented a web application to deploy our model at the point of patient prescription	

CONFERENCES/INVITED TALKS

Importance of Programming in Research	Spring 2020
<ul style="list-style-type: none">• Invited panelist for Student Research Week Competition at Texas A&M University	
Generalized Summation Methods for Divergent Series (link to paper)	Spring 2017
<ul style="list-style-type: none">• Researched assigning values to divergent series and applications to physics and microelectromechanical systems• Funding provided by the National Science Foundation to present at the 2017 Southeastern Undergraduate Mathematics Workshop	
A Historical Survey of French Number Theory (link to paper)	Fall 2016
<ul style="list-style-type: none">• Translated 18th - 19th century mathematics and analyzed their significance in the development of number theory• Funding provided by the Texas A&M Department of Mathematics to present at a Mathematical Association of America conference	

TECHNICAL SKILLS

Primary Languages/Technologies: Python (including Flask, tornado, scikit-learn, etc.), R, SQL, Git, Linux, Azure, Jenkins
Secondary Languages/Technologies: Rust, OCaml, Haskell, Perl, C, PHP
Statistics/Machine Learning: Optimization methods, PCA, Clustering/Classification, Neural Nets, Bayesian Estimation
Mathematics: Complex/Real Analysis, Number Theory, Linear Algebra, Introductory Cryptography
Quantitative Finance: Yield Curve PCA, Analysis of MBS and MSR, Monte Carlo Pricing Methods
Languages: Written proficiency in French