Morgan Squire, ACAS

Data Scientist

Innovative Data Scientist and Actuary with six years of experience modernizing and automating analytical processes. Passionate about implementing software development best practices into model development.

Location Riverview, FL
Phone (555) 555-5555
Email first.last@domain.com
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GitHub mosquire

Skills

Languages	Development Tools	Statistical Modeling	Data	Package Development
Python	Git	Generalized Linear Modeling	Hive	Unit Testing
R	VSCode	Generalized Additive Modeling	Parquet	Docstrings/Roxygen
SQL	RStudio	Downsampling/Upweighting	Snowflake	Logging
Latex	JupyterLab	Regularization	Partitioning	Debugging
	Conda	Tree-Based Machine Learning	JSON	Markdown

Experience

USAA — 2016 - Present

Associate Actuary — **2020 - Present**

- Overhauled the Homeowners loss models to incorporate claim type into claim surcharges to reduce subsidy
- Led a team of 4 in the development of an internal Python package using H2O and scikit-learn
- Reduced model fit times by 50% by implementing a model pipeline cache
- Mentored Data Scientists and Actuaries on Python package development to include unit testing, documentation, website publishing, logging, debugging, and git branching strategies.
- Designed and delivered 6 hours of interactive training for a team of 12 model developers including a tutorial Git repository that covered Python, Git, H2O and an internal model development Python package
- Established 14 virtual machines to enable a team of model developers to fit models on a 40 GB dataset in H2O
- Presented complex technical improvements to executive leadership on multiple occasions

Actuarial Analyst — **2017 - 2020**

- Developed an advanced process for territorial smoothing that incorporated thin plate splines in a Generalized Additive Model in R
- Coordinated with the Texas Department of Insurance to secure approval of a new capital allocation strategy
- Designed and published an R package with tools for connecting to internal databases and estimating within-class and between-class variance
- Trained the modeling community of practice on R package development tailored to internal systems
- Optimized deductible rating factors using R to calculate granular loss elimination ratios which enabled the rollout of new deductible options
- Filed many rate changes in Homeowners, Renters, and Rental Property lines of business

Actuarial Modeling Intern — **2016**

- Adjusted the countrywide Homeowners model to meet state-specific requirements
- Designed an Excel VBA program to automatically generate model performance plots from model outputs.

Education

Bachelor of Science in Applied Mathematics — **December 2016**

University of Evansville, Summa Cum Laude

Credentials

Associate of the Casualty Actuarial Society — **2019**