Alexander Keiya Shoop

225 Townsend Ave, New Haven, CT 06512 • 203-415-3169 • akshoop@wpi.edu

akshoop.github.io

EDUCATION:

Worcester Polytechnic Institute (WPI), Worcester, MA

Master of Science: Data Science, GPA: 3.7/4.0	Dec 2018
Master of Science: Financial Mathematics, GPA: 3.71/4.0	Dec 2017
Bachelors of Science: Actuarial Mathematics and Computer Science, GPA: 3.65/4.0, High Distinction	May 2016

EXPERIENCE:

Healthcare Data Analytics Intern, Harvard Pilgrim Health Care, Wellesley, MA   Jun 2018 – Jul 2018
- Supported the Market Analytics team in engaging in cost of care and trend discussions at the market and executive level
- Developed and presented a fully functional and validated Chi-Square Statistical Test Dashboard in Tableau with dynamic selections and integrated analytics data from existing business intelligence
- Participated and was a part of the winning cross-functional team that designed a mockup of the member experience view in the Employer Analytics Redesign Contest

ITS Helpdesk Specialist, WPI, Worcester, MA   Sep 2012 – May 2018
- Provided customer service and information technology support
- Resolved front-desk and call center support requests concerning technical issues
- Led and trained other student workers via one-on-ones

Actuarial Intern, Sun Life Financial, Wellesley, MA   Jun 2017 – Aug 2017
- Updated the experience studies for annual lapse for wealth management business and expenses for reinsurance business and designed a new death claim lag study using MS Excel and MS Access
- Researched the actuarial life insurance industry standards of practice and protocols

RELEVANT PROJECTS:

Independent Study, Evaluating Early Stage FinTech Companies via Big Data Analytical Tools,   Aug 2017 – Dec 2017
WPI, Cambridge, MA
- Strategized with three graduate students and built an implementation plan for big data analytical projects to be carried by a 6-member undergraduate project team for sponsor companies Vestigo Ventures and Cogo Labs
- Catalogued FinTech startup investment deals received by VC firm Vestigo Ventures using proprietary SQL database
- Developed a probabilistic algorithmic prediction model for Cogo Labs on their ~3.0 petabytes consumer informational database

Major Qualifying Project (MQP), Development of an Operational Process for Continuous Delivery,   Oct 2015 – Dec 2015
WPI, Wall Street project center
- Researched continuous delivery tools for DevOps division of Barclays Investment Bank
- Developed an automated job creation strategy using Jenkins in coordination with Promoted Builds plugin for Prime Financing team
- Presented to the team's manager a visualization of software builds and promotions through pivot tables/charts

Software Engineering Project, WPI   Oct 2014 – Dec 2014
- Collaborated in a team of 12 to develop a Kanban-style project task manager application
- Programmed in Java and Swing using Agile and test-driven development

Interactive Qualifying Project (IQP), Analysis of Consumer Energy Behavior in the Arboretum,   May 2014 – Jun 2014
Worcester, England
- Completed a team project abroad in creating a baseline energy consumption profile of the Arboretum neighborhood in Worcester through door-to-door surveying and canvassing
- The team presented findings to the Environmental Sustainability office of the University of Worcester and to The Lord Faulkner of Worcester

SKILLS:

Programming languages: Python, R, JavaScript, SQL, Java

Software: Git, Numpy, Pandas, Scikit-learn, Hadoop, Cassandra, MongoDB, Tableau, OpenCV, Bloomberg Terminal

Languages: Trilingual (English, Japanese, French)

CERTIFICATIONS: Society of Actuaries (SOA) Exam P/1, Exam FM/2, Bloomberg Market Concepts