

Kristopher J. Overholt

Sales and Solutions Engineer

Algorithmia

Austin, TX (Remote)

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Summary of Qualifications

10+ years of experience working with data science and data analysis with Python and R.

9+ years of working with DevOps tooling, automation, testing, and deployments.

7+ years of academic and industry teaching experience with data science and engineering coursework.

Applying Python and R to engineering problems, data analysis, and computational models.

Administration of on-premises and cloud-based Linux systems with Docker, Kubernetes, and Hadoop.

Education

Ph.D. in Civil Engineering, The University of Texas at Austin, 2013

M.S. in Fire Protection Engineering, Worcester Polytechnic Institute, 2010

B.S. in Fire Protection Engineering Technology, University of Houston–Downtown, 2008

Certifications

Pragmatic Marketing Certified - Level III (PMC-III) - November 2017

Texas Board of Professional Engineers Certified EIT #40629 - September 2008

Employment and Research Experience

Sales and Solutions Engineer

August 2020–Present

Algorithmia

Austin, TX (Remote)

Helping customers benefit from our machine learning operations (MLOps) platform that manages all stages of the ML lifecycle. Working closely with sales prospects to execute on customer opportunities. Creating tailored demos that showcase the breadth and depth of our enterprise product. Creating and nurturing strong customer relationships.

Solutions Engineer

November 2018–July 2020

RStudio

Austin, TX (Remote)

Worked with customers in pre-sales and post-sales activities to integrate enterprise data science products in production environments with Python and R. Developed technical assets and documentation related to enterprise data science products. Worked closely with customer success, support, and product engineering teams. Specialized in enterprise IT infrastructure and DevOps as well as product integrations with Python, Kubernetes, Slurm, and Spark.

Senior Product Manager / Software Engineer

February 2015–October 2018

Anaconda

Austin, TX

Worked with customers and users to understand market problems, then formulate and prioritize repeatable solutions in an enterprise data science platform with Python and R. Performed DevOps, automation, and QA testing for data science platform built on Docker and Kubernetes. Developed tools/products to manage Python packages across bare-metal and cloud-based clusters. Managed cluster computing products that integrate Python with Hadoop and Spark. Coordinated with product marketing team to create webinars, demonstrations, and sales collateral. Worked with customers as a solution architect for cluster computing and data analysis/engineering/model workflows.

Fire Protection Engineer / Software Engineer

May 2012–January 2015

National Institute of Standards and Technology

Gaithersburg, MD

Performed fire model verification and validation work for the US Nuclear Regulatory Commission (NRC) related to empirical correlations and Fire Dynamics Simulator (FDS). Worked with the FDS development team on verification and validation, continuous integration testing, and quality metrics. Conducted fire modeling studies to provide insight on the fire development and thermal conditions during firefighter fatality and injury incidents. Conducted full-scale experimental work related to improving firefighter tactics and safety. Developed sensor-based smart firefighting technology.

Graduate Research Assistant / Software Engineer

January 2010–May 2013

The University of Texas at Austin

Austin, TX

Research assistant on issues related to fire modeling, inverse fire modeling problems, fire suppression systems in nuclear gloveboxes, firefighter line of duty injuries/deaths, wildland fire experiments and modeling, and positive pressure ventilation experiments and simulations.

Graduate Researcher / Software Engineer

May 2011–August 2011

Southwest Research Institute

San Antonio, TX

Performed data analysis on the project: Reducing Uncertainty of Quantifying the Burning Rate of Upholstered Furniture. Fire modeling and data analysis work for full-scale upholstered furniture fire experiments sponsored by the National Institute of Justice (NIJ). Developed fire model simulations and guidance for the forensic investigation of fire incidents involving upholstered furniture.

Adjunct Faculty

August 2010–May 2011

University of Houston–Downtown

Houston, TX

Instructor for fire protection engineering courses including Fire Dynamics, Fire Modeling, Structural Fire Safety, and Advanced Problems in Fire and Safety in the Fire Protection Engineering Technology program.

Research Assistant and Teaching Assistant

August 2008–December 2009

Worcester Polytechnic Institute

Worcester, MA

Teaching assistant to graduate level courses in the Department of Fire Protection Engineering. Research assistant in the fire science laboratory for small-scale commodity tests, including the cone calorimeter. The goal was to better classify and protect commodity storage in warehouse facilities and predict upward flame spread rates in warehouse fires.

Skills and Coursework

Python / NumPy / SciPy / pandas	R / Shiny / RStudio
Data Science Workflows	Predictive Model Development and Deployment
DevOps, CI/CD, and Automation	Slurm and HPC Clustering Technologies
Terraform, Salt, Ansible	Cloud Infrastructure / AWS / GCP / Azure
scikit-learn / Tensorflow	Visualization: matplotlib / seaborn / ggplot
Docker / Container-Based Workflows	Kubernetes Configuration and Administration
Hadoop Configuration and Administration	Hadoop / Spark / PySpark Data Analysis
Mac OS X / Linux / Windows	Fortran / C++
Django / Flask / WordPress	Solution Architecting / Requirements Gathering
Matlab / LabVIEW	Data Analytics Platforms
Small-Scale and Large-Scale Experiments	NIST Fire Dynamics Simulator
Scientific / Technical Copy Editing	CFAST / BRANZFIRE Zone Models
Scientific / High-Performance Computing	Performance-Based Design
Scientific Visualization & Data Analysis	Fire Dynamics
Instrumentation and Data Collection	Fire Alarm Signaling Systems
L ^A T _E X	Structural Design for Fire Safety
Computational Fluid Dynamics	Fire Safety and Hazard Recognition
Engineering Mechanics	Building Fire Safety
Heat Transfer	Automatic Fire Suppression
Combustion	Industrial Safety
Thermodynamics	Fire Modeling
Differential Equations	HVAC Design
Incompressible Flow	Indoor Air Quality: Transport and Control
Fluid Mechanics	Human Factors in Fire Safety
Numerical Methods	Human Exposure to Indoor Air Pollution

Teaching and Tutor Experience

Adjunct Faculty	August 2010–May 2011
Department of Engineering Technology, University of Houston–Downtown	
Courses: Fire Dynamics, Fire Modeling, Structural Fire Safety	
Teaching Assistant	January 2010–May 2010
Department of Mechanical Engineering, The University of Texas at Austin	
Courses: Heat Transfer Lab	
Teaching Assistant	August 2008–December 2009
Department of Fire Protection Engineering, Worcester Polytechnic Institute	
Courses: Fire Dynamics, Fire Protection Systems, Building Fire Safety	
Tutor and Lab Assistant	August 2007–May 2008
Department of Engineering Technology, University of Houston–Downtown	

Memberships

Member, Society of Fire Protection Engineers, 2004–2015
Member, National Fire Protection Association, 2014–2015
Member, International Association for Fire Safety Science, 2011–2015
President, SFPE UT Student Chapter, 2010–2012
President, SFPE WPI Student Chapter, 2009
Founding President, SFPE UHD Student Chapter, 2007

Honors and Awards

Jack Bono Award for Engineering Communications, Society of Fire Protection Engineers, 2017
Best Thesis Award “Excellence in Research”, International Association for Fire Safety Science, 2014
Harry C. Bigglestone Award for Excellence in Communication of Fire Protection Concepts, Fire Technology, National Fire Protection Association, 2013
Honorable Mention, NSF Graduate Research Fellowship, 2009 & 2010
2nd place, Combustion Art Competition, 6th U.S. National Combustion Meeting, 2009
Gerald M. Maatman Fellowship, Kemper Foundation; Fire Science Laboratory, WPI, 2009
Outstanding Graduate – Safety and Fire Engineering Technology, UHD, 2008
LS-AMP Outstanding Scholar Award – Highest GPA in Engineering Technology Dept., UHD, 2008
Brown Foundation Leadership Award – Scholars Academy, UHD, 2007 & 2008
Hat’s Off Award, Society of Fire Protection Engineers Annual Conference, 2007
Outstanding Student – Safety and Fire Engineering Technology, UHD, 2006 & 2007
Louis Stokes Alliance Minority Participation Scholarship, National Science Foundation, 2006
Red Rose Scholarship, UHD, 2006
Rookie of the Year, Klein Fire Department, 2002

Volunteerism

Webmaster Chair, Texas Exes Highland Lakes Chapter; Marble Falls, TX, 2019–Present
Technology Support Team, St. Peter’s Lutheran Church; Marble Falls, TX, 2019–Present
President, Overholser Family Association; Lancaster County, PA, 2017–2019
Webmaster, North Austin Civic Association; Austin, TX, 2010–2013
Orphanage work, Casa Hogar Douglas; Monterrey, Mexico, January 2007
Community Involvement Day; UHD, September 2006
Ed’s Bayou Cleanup; UHD, Spring 2006
Emergency Disaster Preplanning; Loving and Caring Arms Adult Care Facility, March 2006
Tactical Suppression Firefighter, Klein Fire Dept. Station 32; Houston, TX, 2002–2005
Fire alarm system upgrades, Sweetwater Christian School; Houston, TX, 2005