

Roope Hakanpää

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PROFESSIONAL SUMMARY

Research, statistics, and scientific decision-support specialist with 7+ years of experience in quantitative research, statistical modelling, behavioural analysis, forecasting, and operational data systems. Developed analytical solutions using Python, SQL, R, SPSS, experimental methods, real-time multi-source datasets, automated validation, and decision-ready visualisation. Experience combines private-sector marketplace analytics with federally funded meteorological and behavioural research supporting 122 National Weather Service offices.

CORE COMPETENCIES

Quantitative Research & Statistics: Advanced Statistical Methods · Quantitative Research Design · Descriptive & Inferential Statistics · Multivariate Analysis · Hypothesis Testing · Experimental Design · Survey Research · Statistical Interpretation

Behavioural & Communication Research: Cognitive Information Processing · Decision Making Under Uncertainty · Risk Perception · Social Influence · User Research · Mixed Methods · Message Evaluation · Operational Usability

Scientific & Operational Decision Support: Research-to-Operations · Real-Time Data Assimilation · Forecast Evaluation · Probabilistic Information · Situational Awareness · Model Validation · Risk Communication · Public-Safety Applications

Research Data & Analytical Systems: Python · SQL · R · SPSS · MATLAB · Data Integration · Geospatial Analysis · Data Visualisation · Validation Frameworks · Research Documentation

WORK EXPERIENCE

Lead Data Analyst - Statistical Analysis & Decision Support

SidelineSwap | Remote | 2020 – Present

- Designed regression, predictive-modelling, price-forecasting, and trend-analysis systems across large historical sales, inventory, condition, seasonality, and market datasets.
- Developed and maintained 50+ Python scripts and automated workflows for data processing, statistical analysis, validation, reporting, and operational decision support.
- Evaluated analytical and pricing-system performance through historical validation, error analysis, outlier review, forecast comparison, and continuous methodological refinement.
- Built reusable analytical systems processing millions of product, listing, pricing, transaction, and marketplace records across 100+ product categories.
- Implemented data-quality frameworks covering reconciliation, mapping, automated checks, missing-data handling, traceability, and standardised metric definitions.
- Translated complex statistical, operational, and market findings into decision-ready visualisations, reports, and recommendations for technical and non-technical stakeholders.

Research Assistant - Quantitative Research & Decision Support

US Department of Commerce – National Oceanic and Atmospheric Administration
Cooperative Institute for Severe and High-Impact Weather Research and Operations
Oklahoma Climatological Survey | Oklahoma City, United States | 2017 – 2021

- Designed and conducted quantitative, behavioural, mixed-method, and Research-to-Operations studies using real-time and archived meteorological, communication, and operational datasets.
 - Developed standardised data-handling, coding, validation, reconciliation, and geospatial-comparison methods for decision-support systems used across 122 National Weather Service offices.
 - Analysed probabilistic information, cognitive load, uncertainty, communication behaviour, and operational usability, translating findings into publications, presentations, and recommendations for researchers, developers, and public-safety decision makers.
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EDUCATION

Master of Arts – Communication | University of Oklahoma | 2019 – 2021 |

Advanced Statistical Methods · Quantitative Research Methods · Data Analytics & Visualisation · Cognitive Information Processing

Bachelor of Arts – Communication | University of Oklahoma | 2015 – 2019 |

Applied Mathematics · Risk & Crisis Communication · Intercultural Communication

Bachelor of Science – Meteorology | University of Oklahoma | 2015 – 2018 |

Boundary Layer Data Assimilation · Statistical Data Modelling · Numerical Forecasting · Spatiotemporal Data Assimilation

TECHNICAL SKILLS

Statistical & Research Methods: Advanced Statistical Methods · Descriptive & Inferential Statistics · Multivariate Analysis · Structural Equation Modelling · Experimental Design · Survey Research · Hypothesis Testing

Programming & Analytical Tools: Python · SQL (Advanced) · R · MATLAB · SPSS · Pandas · NumPy · Scikit-learn

Scientific & Geospatial Systems: AWIPS II · NetCDF · MetPy · GIS · GEMPAK · IDV · GOES Rapid Scan · Multi-Sensor Data Integration

Data Integration & Quality: ETL/ELT Pipeline Development · Real-Time Data Assimilation · Data Reconciliation · Automated Validation · Outlier Detection · Missing-Data Handling · Git

Visualisation & Decision Support: Power BI · Tableau · Metabase · Matplotlib · Excel (Advanced) · Probabilistic Hazard Information · NWSChat · FACETS

Research Communication & Documentation: Scientific Writing · Peer-Reviewed Publications · Research Reports · Conference Presentations · Technical Documentation · Training Materials · Stakeholder Briefings

LANGUAGES

English – Native

Finnish – C1

French – C2

Italian – B1