

useR! 2021 The R Conference

5-9 July 2021 | Online



⊞ Conference Agenda

Overview and details of the sessions of this conference. Please select a date or location to show only sessions at that day or location. Please select a single session for detailed view (with abstracts and downloads if available).



Session Overview

Date: Sunday, 04/July/2021

10:15pm
Location: The Lounge #announcements
Chair: Rocío Joo
Chair: Heather Turner
Zoom Host: Marcela Alfaro Cordoba

Zoom Host: Marcela Alfaro Cordoba Zoom Host (R): Andrea Sánchez-Tapia Chair: Yanina Noemi Bellini Saibene

A warm welcome for our first timezone, along with a quick guide on how to navigate the conference

11:15pm My first UseR! (PDT)

Location: The Lounge #new_to_UseR!
Chair: Batool Almarzouq
Zoom Host: Andrea Sánchez-Tapia

Zoom Host: Andrea Sánchez-Tapia Zoom Host (R): Marcela Alfaro Cordoba A session for newcomers to useR!

11:15pm - 12:15am

Social Events

Chair: Erin LeDell

6:15pm

My first UseR! (PDT)
Batool Almazrouq

Date: Monday, 05/July/2021

7:15am Welcome and Navigation Guide (AWST) Location: The Lounge #announcements
Chair: Dorothea Hug Peter
Chair: Matt Bannert 8:15am Zoom Host: Saranjeet Kaur Bhogal Zoom Host (R): Faith Musili Chair: Heather Turner A warm welcome for our second timezone, along with a quick guide on how to navigate the conference 1:15pm Welcome and Navigation Guide (CEST) Location: The Lounge #announcements
Chair: Rocío Joo 2:15pm Chair: Yanina Noemi Bellini Saibene Zoom Host: Faith Musili Zoom Host (R): Saranjeet Kaur Bhogal Zoom Host (R2): Heather Turner Chair: Matt Bannert A warm welcome for our third timezone, along with a quick guide on how to navigate the conference 2:15pm My first UseR! (CEST) Location: The Lounge #new_to_UseR!
Chair: Batool Almarzouq 3:15pm Zoom Host: Erin West Zoom Host (R): Natalia Soledad Morandeira A session for newcomers to useR! 3:30pm **Keynote: R Spatial** Location: The Lounge #key_pebesma Chair: Peter Macharia Zoom Host: Linda Jazmín Cabrera Orellana 4:30pm Zoom Host (R): s gwynn sturdevant Keynote Talk Edzer Pebesma 4:30pm Location: The Lounge #lobby 4:45pm 4:45pm 1A - Community and Outreach 1 1B - R packages 1 Location: The Lounge #talk_community_outreach_1 Location: The Lounge #talk_packages_1

Chair: Luis Darcy Verde Arregoitia

Zoom Host: **s gwynn sturdevant** Zoom Host (R): **Linda Jazmín Cabrera Orellana** Session Sponsor: ixpantia Zoom Host: Juan Pablo Narváez-Gómez Zoom Host (R): CHIBUOKEM BEN UBAH Session Sponsor: R Studio 4:45pm - 5:05pm 4:45pm - 5:05pm Talk-Video Talk-Live Regular Talk Regular Talk R for Non-Programmers: Creating Paradigm Shifts in Reporting for RcppDeepState, a simple way to fuzz test R packages. Community-Facing Organizations Using R Akhila Chowdary Kolla, Dr. Toby Dylan Hocking, Dr. Alex groce Lisa Kulka, Sulagna Patra, Mohammad Haque 5:05pm - 5:25pm Talk-Live Regular Talk 5:05pm - 5:25pm Talk-Live Regular Talk R in Regulated Industries: Assessing Risk with {riskmetric} rOpenSci's Model for Managing a Federated Open Source Software Doug Kelkhoff, Yilong;, and many more contributors at the R Validation Hub Zhang Stefanie Butland, Lou Woodley, Karthik Ram 5:25pm - 5:45pm Talk-Video 5:25pm - 5:45pm Regular Talk Talk-Video Regular Talk {poorman} - A dependency free recreation of {dplyr} R Developer's Guide Nathan Wayne Eastwood Saranjeet Kaur Bhogal, Heather Turner, Michael Lawrence 5:45pm - 6:05pm Regular Talk Packages submission and reviews; how does it work? Lluís Revilla Sancho Break Location: The Lounge #lobby 2A - Data Management 2B - Shinv Location: The Lounge #talk_data_management Location: The Lounge #talk_shiny Chair: Christopher Maronga Zoom Host: Linda Jazmín Cabrera Orellana Chair: Mohamed El Fodil Ihaddaden Zoom Host: CHIBUOKEM BEN UBAH Zoom Host (R): s gwynn sturdevant Zoom Host (R): Juan Pablo Narváez-Gómez Session Sponsor: cynkra Session Sponsor: Open Analytics Session Slide Session Slide 6:30pm - 6:50pm Talk-Video 6:30pm - 6:50pm Talk-Video Regular Talk Regular Talk **Solving Big Data Problems with Apache Arrow** All-in-one smartphone-based system for quantitative analysis of **Neal Richardson** point-of-care diagnostics Weronika Schary, Filip Paskali, Matthias Kohl 6:50pm - 7:10pm Talk-Live 6:50pm - 7:10pm Regular Talk Regular Talk respectables and synthetic.cdisc.data: A framework for creating **Unit Testing Shiny App Reactivity** relational data with application Gabriel Becker, Adrian Waddell Jonathan Sidi 7:10pm - 7:30pm 7:10pm - 7:30pm Talk-Video Talk-Video Regular Talk Regular Talk Going Big and Fast - {kafkaesque} for Kafka Access ShinyQuickStarter: Build Shiny apps interactively with Drag & Drop Peter Meißner Leon Binder 7:30pm - 7:50pm sponsored-video 7:30pm - 7:50pm Talk-Video Regular Talk Sponsored Talk Scaling R for Enterprise Data ShinyProxy. The Good News Show. Tobia De Koninck **Mark Hornick** Break Location: The Lounge #lobby Keynote: Tools and technologies for supporting algorithm fairness and inclusion Location: The Lounge #key_resp_prog Chair: Vebashini Naidoo Chair: Shelmith Kariuki Zoom Host: Juan Pablo Narváez-Gómez Zoom Host (R): CHIBUOKEM BEN UBAH

8:00pm

6:15pm

6:30pm 6:30pm

8:00pm

8:30pm 8:30pm

Break

10:00pm

Keynote Talk Achim Zeileis, Dorothy Gordon, Kristian Lum, Jonathan Godfrey

10:00pm

Location: The Lounge #lobby

10:30pm 10:30pm

Incubator: Five principles to grow up your R community

Location: The Lounge #incubator_r_community

11:30pm

Chair: Joselyn Chávez Chair: Leonardo Collado Torres Zoom Host: s gwynn sturdevant

Zoom Host (R): Linda Jazmín Cabrera Orellana

Incubator

Joselyn C. Chávez-Fuentes, Erick Cuevas-Fernández, Alejandro Reyes, Leonardo Collado-Torres

11:30pm MiR Meeting

MiR Meeting Recharge 1

Zoom Host: CHIBUOKEM BEN UBAH Zoom Host (R): Juan Pablo Narváez-Gómez Location: The Lounge #announcements
Zoom Host: Marcela Alfaro Cordoba
Yoga Intro + Breathing exercises

Date: Tuesday, 06/July/2021

12:00am RechaRge 1

- Chair: Marcela Alfaro Cordoba 12:30am Yoga Intro + Breathing exercises

12:30am Break

- Location: The Lounge #lobby

12:45am

12:45am -2:15am Elevator Pitches 1

Location: The Lounge #elevator_pitches

Elevator Pitch

Hetu-package: Validating and Extracting Information from Finnish National Identification Numbers

Pyry Kantanen, Måns Magnusson, Jussi Paananen, Leo Lahti

Elevator Pitch

Visualising variable importance and variable interaction effects in machine learning models.

Alan Inglis, Andrew Parnell, Catherine Hurley

Elevator Pitch

Obtaining reproducible reports on satellite hotspot data during a wildfire disaster

Natalia Soledad Morandeira

Elevator Pitch

Modeling spatio-temporal point processes with nphawkes package

Peter Boyd, Dr. James Molyneux

Elevator Pitch

Use Case: Functional Programming and Parallelization in Spatial Point Pattern Analysis

Clara Chua, Tin Seong Kam

Elevator Pitch

Predicting the COVID-19 Pandemic Impact on Clinical Trial Recruitment at GSK

<u>Valeriia Sherina</u>, Nicky Best, Graeme Archer, Jack Euesden, Dave Lunn, Inna Perevozskaya, Doug Thompson, Magda Zwierzyna

Elevator Pitch

The Grammar of Experimental Design

Emi Tanaka

Elevator Pitch

rspatialdata: a collection of data sources and tutorials on downloading and visualising spatial data using R

Varsha Ujjini Vijay Kumar, Dilinie Seimon, Paula Moraga

Elevator Pitch

Moved to Session 2

Test Test

Elevator Pitch

Teaching Advanced Data Science in R: Successes and Failures

Lisa Lendway

Elevator Pitch

rRbiMs, r tools for Reconstructing bin Metabolisms.

Mirna Vázquez Rosas Landa, Valerie de Anda Torres, Sahil Shan, Brett Baker

Elevator Pitch

ResidualRWA: Detecting relevant variable using relative weight analysis with residualization

Maikol Solís, Carlos Pasquier

Elevator Pitch

serosurvey R package: Serological Survey Analysis For Prevalence Estimation Under Misclassification

Elevator Pitch

httrex: Help Debugging HTTP API Clients

Greg Daniel Freedman Ellis

Elevator Pitch

Reading, Combining, and Pre-Filtering Files with R and AWK

David Shilane, Mayur Bansal, Chung Woo Lee

Elevator Pitch

DATA PIPELINE: IMPROVING MANAGEMENT OF FINANCIAL CONTRIBUTIONS TO THE FIGHT AGAINST POVERTY IN COSTA RICA

Roberto Delgado Castro

Elevator Pitch

mctg: An R Package for the Munich ChronoType Questionnaire

Daniel Vartanian, Ana Amélia Benedito-Silva, Mario Pedrazzoli

Elevator Pitch

{flowDiv} workflow: reproducible cytometric diversity estimates

María Victoria Quiroga, Bruno M. S. Wanderley, André M. Amado, Fernando Unrein

From Sheets to Success: Reliable, Reproducible, yet Flexible Production Pipelines

Katrina Brock

Elevator Pitch

Efficient multi-wave sampling with the R package optimall

Jasper B. Yang, Bryan E. Shepherd, Thomas Lumley, Pamela A. Shaw

Elevator Pitch

Open the Machine Learning Black-Box with modelStudio & Arena

Hubert Baniecki, Piotr Piątyszek

Elevator Pitch

Classifying Student's Learning Pattern using R Sequence Analysis Packages: The Impact of Procrastination on Performance

Teck Kiang Tan

Elevator Pitch

Outlier redemption

Violeta Roizman

Elevator Pitch

The Canyon of Success: Scaling Best Practices in R with Internal R packages

Malcolm Barrett

Modeling tumor evolutionary dynamics with SITH

Phillip Nicol, Amir Asiaee

Talk-Video

A Glimpse into the Reproduciblity of Scientific Papers published in Movement Ecology: How are we doing?

Jenicca Poongavanan, Rocio Joo Arakawa, Mathieu Basille

Talk-Video

Elevator Pitch

Forecasting under COVID: when simple works - and when it doesn't

Maryam Shobeirinejad, Steph Stammel

Elevator Pitch

gatpkg: Developing a geographic aggregation tool in R for non-programmers

Abigail Stamm

Elevator Pitch

tidyndr: An R package for analysis of the Nigeria HIV National Data Repository

Stephen Taiye Balogun, Scholastica Olanrewaju, Oluwaseun Okunuga, Temitope Kolade, Geraldine Chizoba Abone, Fati Murtala-Ibrahim, Helen Omuh

Elevator Pitch

Do you see what I see? Introducing microshades: An R package for improving color accessibility and organization of complex data Lisa Karstens, Erin Dahl, Emory Neer

2:15am

mixR!

Music, networking channel and raffles. To end the day in a relaxing way

3:15am

6:30am CreationLab

Chair: Marcela Alfaro Cordoba 7:30am Draw cartoons and tell stories

7:30am 8:30am

Keynote: Can we do this in R? - Answering questions about air quality one code at a time

Location: The Lounge #key_kushwaha

Chair: Adithi R. Upadhya

Zoom Host: Rachel Heyard Zoom Host (R): Nasrin Fathollahzadeh Attar

Keynote Talk

Management

Session Slides

Regular Talk

8:45am - 9:05am Talk-Live

9:05am - 9:25am

Talk-Video

Regular Talk

Alexander Bernd Hanf

Meenakshi Kushwaha

8:30am

Break

Location: The Lounge #lobby

3A - Machine Learning and Data

Location: The Lounge #talk_ml_dm

Zoom Host (R2): Faith Musili
Session Sponsor: MemVerge

mlr3automl - Automated Machine Learning

Triplot: model agnostic measures and

hierarchical correlation structure

Katarzyna Pękala, Katarzyna Woźnica,

visualisations for variable importance in

predictive models that take into account the

8:45am 8:45am

10:15am

3B - Spatial Analysis

3C - R Packages 2

8:45am - 9:05am

Talk-Video

Talk-Video Regular Talk

Talk-Live

Regular Talk

Regular Talk

Mark Padgham

9:05am - 9:25am

Mark van der Loo

9:25am - 9:45am

Sébastien Rochette

Zoom Host: Maryam Alizadeh Zoom Host (R): Rachel Heyard Zoom Host (R2): Faith Musili

Location: The Lounge #talk_packages_2
Chair: Maëlle Salmon

autotest: Automatic testing of R packages

A fresh look at unit testing with tinytest

{fusen}: Create a package from Rmd files

Location: The Lounge #talk_spatial_analysis Chair: Inger Fabris-Rotelli Zoom Host: Tuli Amutenya Zoom Host (R): Rachel Heyard Zoom Host (R2): Faith Musili

8:45am - 9:05am Talk-Video

Regular Talk

Tidy Geospatial Networks in R

<u>Lucas van der Meer</u>, Lorena Abad, Andrea Gilardi, Robin Lovelace

9:05am - 9:25am

Talk-Live Regular Talk

slopes: a package for calculated slopes of roads, rivers and other linear (simple)

features

Robin Lovelace, Rosa Félix

9:25am - 9:45am

Talk-Live

Regular Talk

mapsf, a New Package for Thematic

Mapping

Timothée Giraud

9:45am - 10:05am

Talk-Video Regular Talk

datasets

osmextract: An R package to download, convert, and import large OpenStreetMap

Andrea Gilardi, Robin Lovelace

Talk-Video Regular Talk Getting sprung in R: Introduction to the

rsetse package for embedding feature-rich networks

Jonathan Bourne

Przemysław Biecek

9:25am - 9:45am

9:45am - 10:05am Regular Talk

An R package for the implementation of Efficiency Analysis Trees and the estimation of technical efficiency

Miriam Esteve, Victor J. España, Juan Aparicio,

Xavier Barber

10:15am RechaRge 2 Chair: Marcela Alfaro Cordoba 11:15am

Zoom Host: Rachel Heyard Zoom Host (R): Maryam Alizadeh Zoom Host (R2): Nasrin Fathollahzadeh Attar

Yoga for Calm + Meditation

11:15am 4A - Trends, Markets and Models

Location: The Lounge

RLadies Meeting

Location: The Lounge #R-Ladies Chair: Sara Mortara Zoom Host: Tuli Amutenya Zoom Host (R): Faith Musili

4B - Data viz and Spatial Applications

Location: The Lounge #talk_dataviz_spatial

https://www.conftool.org/user2021/index.php?page=browseSessions&print=export&mode=table&presentations=show

12:45pm

#talk_trends_markets_models Chair: Mouna Belaid Zoom Host: Faith Musili

Zoom Host (R): Maryam Alizadeh

11:15am - 11:35am Talk-Live Regular Talk

Let Me Google That for You - Measuring global trends using Google Trends

Harald Puhr, Jakob Müllner

11:35am - 11:55am Talk-Live Regular Talk

Computing Disposition Effect on Financial Market Data

Lorenzo Mazzucchelli, Marco Zanotti

11:55am - 12:15pm Talk-Live Regular Talk

The R Package diseq: Estimation Methods for Markets in Equilibrium and Disequilibrium

Pantelis Karapanagiotis

12:45pm **Break**

Location: The Lounge #lobby

1:00pm

1:00pm

2:30pm

Elevator Pitches 2 Location: The Lounge #elevator_pitches

Elevator Pitch

Make Your Computational Analysis Citable

Batool Almarzouq

Elevator Pitch

Structural connectivity in the Lower Uruguay River Forest

Adriana Rojas, Mariel Bazzalo, Natalia Morandeira

Elevator Pitch

Fitting the beta distribution for the intra-apiary dynamics study of the infestation rate with Varroa Destructor in honey bee colonies Camila Miotti, Ana Molineri, Adriana Pacini, Emanuel Orellano, Marcelo Signorini, Agostina Giacobino

Chair: Natalia Soledad Morandeira

Visual Diagnostics for Constrained

Optimisation with Application to Guided

H. Sherry Zhang, Dianne Cook, Ursula Laa, Nicolas Langrené, Patricia Menéndez

geofi-package: Facilitating the access to

key spatial datasets in Finland

Virtual Environments: Using R as a

Frontend for 3D Rendering of Digital

Michael J. Mahoney, Colin M. Beier, Aidan C.

Zoom Host: Rachel Heyard Zoom Host (R): Tuli Amutenya

Session Slic 11:15am - 11:35am

Talk-Live Regular Talk

Tours

11:35am - 11:55am

Talk-Video Regular Talk

Markus Kainu

Talk-Video Regular Talk

Landscapes

11:55am - 12:15pm

Elevator Pitch

C50 Classification of young Moroccan men and women not in employment, education or training (NEET).

Salima MANSOURI, Hafsa EL HAFYANI, Ichark LAFRAM

Elevator Pitch

Decision support using R and DataOps at a European Union bank regulator

Jonas Bergstrom, Nicolas Pochet

Elevator Pitch

fipp: a bridge between domain knowledge and model specification in Dirichlet Process Mixtures and Mixture of Finite Mixtures Jan Greve, Bettina Grün, Gertraud Malsiner-Walli, Sylvia Frühwirth-Schnatter

Elevator Pitch

An integrated teaching environment for R with {learnitdown}

Philippe Grosjean, Guyliann Engels

Elevator Pitch

Visualization of the one-way flexible ANOVA tests using with {doexplot}

Mustafa Cavus

Flevator Pitch

TrackJR: a new R-package using Julia language for tracking tiny insects

Gerardo de la vega, Federico Triñanes, Andres Gonzalez Ritzel

Elevator Pitch

shiny.fluent and shiny.react: Build Beautiful Shiny Apps Using Microsoft's Fluent UI

Marek Rogala

Elevator Pitch

Conducting Effective User Tests for Shiny Dashboards

Maria Grycuk

Elevator Pitch

NNcompare: An R package supporting the peer programming process in clinical studies

Mette Bendtsen, Steffen Falgreen Larsen, Frederik Vandvig Heinen, Claus Dethlefsen

Elevator Pitch

The evolution of the dependencies of CRAN packages

Clement Lee

Elevator Pitch

Bootstrapping Multilevel Models in R using Imeresampler

Adam Loy

Elevator Pitch

RCode, a new IDE for R

Nicolas Baradel, William Jouot

Elevator Pitch

R Package Validation and {valtools}

Ellis Hughes

Elevator Pitch

NetCoupler: Inferring causal pathways between high-dimensional metabolomics data and external factors

Luke W. Johnston, Clemens Wittenbecher, Fabian Eichelmann

Elevator Pitch

Continuously expanding Techguides: An open source project based on bookdown using CI/CD pipelines from GitHub Actions

Peter Schmid

Elevator Pitch

R as a an environment for the functional analysis of proteins

Michał Burdukiewicz

Elevator Pitch

Statistical Workflows in R for Imaging Mass Spectrometry Data

Hoang Tran, Valeriia Sherina, Fang Xie

Elevator Pitch

Hi, Let's Talk About Data Science! - Customize Your Personal Data Science Assistant Bot.

Livia Eichenberger, Oliver Guggenbühl

Elevator Pitch

NNSampleSize: A tool for communicating, determining and documenting sample size in clinical trials

Claus Dethlefsen, Steffen Falgreen Larsen, Anders Ellern Bilgrau, Nynne Holdt-Caspersen, Maika Lindkvist Jensen

Elevator Pitch

pARI package: valid double-dipping via permutation-based All Resolutions Inference

Angela Andreella, Jelle Goeman, Livio Finos, Wouter Weeda, Jesse Hemerik

Elevator Pitch

Data Access and dynamic Visualization for Clinical Insights (DaVinci)

 $\underline{\textbf{Matthias Trampisch}}, \textbf{Julia Igel}, \textbf{Andre Haugg}$

Elevator Pitch

Reproducibility and dissemination in the research: a case of study of the bioaerosol dynamics

<u>Jesús Rojo</u>, Antonio Picornell, Jeroen Buters, Jose Oteros

Elevator Pitch

R in the aiR!

Adithi R. Upadhya, Pratyush Agrawal, Sreekanth Vakacherla, Meenakshi Kushwaha

Elevator Pitch

segmenter: A Wrapper for JAVA ChromHMM

Mahmoud Ahmed, Deok Ryong Kim

Elevator Pitch

Efficient list recursion in R with rrapply

Joris Chau

Elevator Pitch

An R package to flexibly generate simulation model flow diagrams

Andreas Handel, Andrew Tredennick

Elevator Pitch

Using R Markdown to Automate COVID-19 Reporting

Farzad Islam, Michael Elten, Najmus Saqib

Elevator Pitch

Cumulative Link Mixed-effects Models (CLMMs) as a tool to model ordinal response variables and incorporate random effects

Christophe Bousquet

Elevator Pitch

High dimensional data visualization in ggplot2

Zehao Xu, Wayne Oldford

Elevator Pitch

Charting Covid with the DatawRappr-Package

Benedict Witzenberger

Elevator Pitch

Bringing AutoDiff to R packages

Michael Komodromos

Elevator Pitch

Healthier & Happier Hands: Software and Hardware Solutions for More Ergonomic Typing

John Paul Helveston

Elevator Pitch

High Dimensional Penalized Generalized Linear Mixed Models: The glmmPen R Package

<u>Hillary M. Heiling, Naim U. Rashid, Quefeng Li, Joseph G. Ibrahim</u>

Elevator Pitch

trackdown: collaborative writing and editing your R Markdown and Sweave documents in Google Drive

Filippo Gambarota, Claudio Zandonella Callegher, Janosch Linkersdörfer, Mathew Ling, Emily Kothe

Elevator Pitch

Multivariate functional data analysis

Manuel Oviedo-de la Fuente, Manuel Febrero-Bande

Elevator Pitch

Multivariate functional principal component analysis on high dimensional gait data

Sajal Kaur Minhas, Morgan Sangeux, Julia Polak, Michelle Carey

Elevator Pitch

Teaching an introductory programming course with R

Reto Stauffer, Joanna Chimiak-Opoka, Luis M Rodriguez-R, Achim Zeileis

Elevator Pitch

Landscape of R packages for eXplainable Artificial Intelligence

Szymon Maksymiuk, Alicja Gosiewska, Przemysław Biecek

Flevator Pitch

Reactive PK/PD: An R shiny application simplifying the PK/PD review process

Kristoffer Segerstrøm Mørk, Steffen Falgreen Larsen

Elevator Pitch

r-cubed: Guiding the overwhelmed scientist from random wrangling to Reproducible Research in R

Hannah Chatwin, Luke W. Johnston, Helene Baek Juel, Bettina Lengger, Daniel R. Witte, Malene Revsbech Christiansen, Anders Aasted Isaksen

Elevator Pitch

Validate observations stored in a DB

Edwin de Jonge

Elevator Pitch

Teaching Biology students to code smoothly with learnR and gradethis

Guyliann Engels, Philippe Grosjean

Elevator Pitch

Partial Least Squares Regression for Beta Regression Models

Frederic Bertrand, Myriam Maumy

Elevator Pitch

Simpler is Better: Lifting Interpretability-Performance Trade-off via Automated Feature Engineering

Alicja Gosiewska, Anna Kozak, Przemysław Biecek

Elevator Pitch

State of the Market - Infinite State Hidden Markov Models

Dean Markwick

Elevator Pitch

networkABC: Network Reverse Engineering with Approximate Bayesian Computation

Myriam Maumy, Frederic Bertrand

Elevator Pitch

Navigating Insurance Claim Data Through Tidymodels Universe

Jun Haur Lok, Tin Seong Kam

Elevator Pitch

tramME: Mixed-Effects Transformation Models Using Template Model Builder

Balint Tamasi, Torsten Hothorn

2:30pm

Location: The Lounge #lobby

2:45pm

2:45pm 3:45pm Keynote: Enseñando a enseñar sin perder a nadie en el camino - Teaching how to teach without leaving anyone behind Location: The Lounge #key_metadocencia

Chair: Juan Pablo Ruiz Nicolini Zoom Host: Nasrin Fathollahzadeh Attar Zoom Host (R): Tuli Amutenya

Session Sponsor: ixpantia Session Slide

Keynote Talk

Paola Corrales, Elio Campitelli, Ivan Poggio

3:45pm

Break

Location: The Lounge #lobby

4:00pm

4:00pm

6.0000

5:00pm

Incubator: The role of the R community in the RSE movement

Location: The Lounge #incubator_rse Chair: Matt Bannert

Chair: Heather Turner Zoom Host: Faith Musili Zoom Host (R): Rachel Heyard

Incubator

Heidi Seibold, Heather Turner, Matt Bannert

Panel: R User or R Developer? This is the question!

Chair: Francesca Vitalini
Zoom Host: Maryam Alizadeh
Zoom Host (R): Tuli Amutenya

Francesca Vitalini, Riccardo Porreca, Stéphanie Gehring, Peter Schmid

5:00pm

Music, networking channel and raffles. To end the day in a relaxing way

https://www.conftool.org/user2021/index.php?page=browseSessions&print=export&mode=table&presentations=show. The properties of the proper

ווועטט.ס 11:15pm

Tutorials - Track 2

11:15pm - 2:15am 11:59pm

Translating R to Your Language Michael Chirico, Michael Lawrence

Date: Wednesday, 07/July/2021

Movie: Coded Bias

The movie: "Coded Bias" will be available to watch during 24 hours, and we'll have a channel open for discussions

7:00am 11:59pm Tutorials - Track 1 **Tutorials - Track 2 Tutorials - Track 3** 7:00am - 9:00am

Tutorial Data visualization using ggplot2 and its extensions Haifa Ben Messaoud, Mouna Belaid,

Kaouthar Driss, Amir Souissi

9:00am - 9:15am Breaks Break useR! 2021

9:15am - 11:45am

Tutorial **Additive Bayesian Networks** Modeling

Gilles Kratzer, Reinhard Furrer 11:45am - 12:00pm

Breaks Break useR! 2021

Tutorial

12:00pm - 2:00pm

Quick high quality maps with R Jan-Philipp Kolb

2:00pm - 2:15pm

Breaks Break useR! 2021

2:15pm - 4:15pm

Spatial Statistics for huge datasets and best practices

Reinhard Furrer, Roman Flury, Federico Blasi

4:15pm - 4:30pm

Breaks Break useR! 2021

4:30pm - 7:30pm

Tutorial

Contributing to R

Gabriel Becker, Martin Maechler

7:30pm - 7:45pm

Breaks Break useR! 2021

7:45pm - 10:15pm Talk-Live

7:00am - 10:00am

Tutorial GET better at testing your R package!

Maëlle Salmon, Scott Chamberlain

10:00am - 10:15am

Breaks **Break** useR! 2021

10:15am - 2:15pm

Tutorial

Systematic data validation with the validate package

Mark van der Loo, Edwin de Jonge

2:15pm - 2:30pm

Breaks Break useR! 2021

2:30pm - 6:00pm

Tutorial

Production-grade Shiny Apps with {golem} - French Vincent GUYADER, Cervan Girard

6:00pm - 6:15pm

Breaks Break

useR! 2021

6:15pm - 7:15pm

Penguins in a Box: Interactive **Data Science Tutorial with Penauins**

Maria Dermit, Susana Escobar

7:15pm - 8:00pm

Breaks **Break** useR! 2021

8:00pm - 11:00pm

11:00pm - 11:15pm

Professional, Polished, Presentable: Making Great Slides with xaringan

Garrick Aden-Buie, Silvia Canelón

Breaks

Break useR! 2021 7:00am - 10:00am Talk-Live

Tutorial

Introduction to Responsible **Machine Learning**

Anna Kozak, Hubert Banjecki, Przemyslaw Biecek, Jakub Wisniewski

10:00am - 10:15am

Breaks Break

useR! 2021

10:15am - 2:15pm

Tutorial

Entry level R maps from African data - French - English

Andy South, Anelda van der Walt, Ahmadou Dicko, Shelmith Kariuki, Laurie Baker

2:15pm - 2:30pm

Breaks Break

useR! 2021

2:30pm - 5:30pm

Tutorial

How to build a package with "Rmd First" method

Sébastien Rochette, Emily Riederer

5:30pm - 5:45pm

Breaks Break

useR! 2021

5:45pm - 8:30pm Talk-Live Tutorial

Bayesian modeling in R with {rstanarm} - Spanish

Fernando Antonio Zepeda Herrera

8:30pm - 8:45pm

Breaks Break useR! 2021

8:45pm - 11:45pm

Introduction to TileDB for R Dirk Eddelbuettel, Aaron Wolen **Tutorials - Track 4**

7:00am - 9:00am

Tutorial

Structure your app: introduction to Shiny modules

Jonas Hagenberg

9:00am - 10:30am

Breaks **Break** useRI 2021

10:30am - 1:30pm

Getting started with torch (in French)

Sigrid Keydana, Daniel Falbel

1:30pm - 1:45pm

Breaks **Break** useR! 2021

1:45pm - 2:45pm

Tutorial

Pinguinos en caja: tutorial interactivo de ciencia de datos con pinguinos -Español.

Maria Dermit, Susana Escobar

2:45pm - 3:00pm

Breaks Break useR! 2021

3:00pm - 6:00pm

Tutorial

Data Pipelines at scale with R and Kubernetes - Spanish Frans van Dunné

6:00pm - 6:15pm

Broaks

Break useR! 2021

6:15pm - 9:15pm

Tutorial

Datos espaciales a lo tidy -**Español**

Elio Campitelli, Paola Corrales

Tutorial

Graphing multivariate categorical data: The how, what and why of mosaic plots and alluvial diagrams

Joyce Robbins, Ludmila Janda

Date: Thursday, 08/July/2021

12:30am

Keynote: Expanding the Vocabulary of R Graphics

Location: The Lounge #key_murrell 1:30am

Chair: Joyce Robbins Zoom Host: Olgun Aydin Zoom Host (R): Jyoti Bhogal

Keynote Talk Paul Murrell

Break

1:30am

Location: The Lounge #lobby

1:45am

1:45am

3:15am

5A - Teaching R and R in Teaching Location: The Lounge #talk_teaching
Chair: Karthik Raman Zoom Host: Adrian Maga Zoom Host (R): **Jyoti Bhogal** Session Sponsor: Appsilon Session Slides

1:45am - 2:05am Talk-Video Regular Talk

Developing a datasets based R package to teach environmental data science

Allison Horst, Julien Brun

2:05am - 2:25am Talk-Video Regular Talk

Using R as a Community Workbench for The Carpentries Lesson Infrastructure Zhian N. Kamvar, François Michonneau

2:25am - 2:45am Talk-Video Regular Talk

Teaching and Learning Bayesian Statistics with {bayesrules}

Mine Dogucu, Alicia A. Johnson, Miles Ott

2:45am - 3:05am Talk-Live Regular Talk

Building and maintaining OpenIntro using the R ecosystem

Mine Cetinkaya-Rundel

Break 3:15am

Location: The Lounge #lobby 3:30am

3:30am

Incubator: Strategies to build a strong AsiaR Community

Location: The Lounge #incubator_asian Chair: Janani Ravi Chair: Adithi R. Upadhya 4:30am Zoom Host: Jyoti Bhogal Zoom Host (R): Olgun Aydin

Incubator

Adithi R. Upadhya, Dr. Janani Ravi

4:30am aRt Gallery

Location: The Lounge #announcements Chair: Sara Mortara
Chair: Marcela Alfaro Cordoba 5:30am

Meet some aRtists

5:30am

7:00am

6A - Data visualisation

Location: The Lounge #talk_dataviz
Chair: Praveena Mathews Zoom Host: Olgun Aydin Zoom Host (R): Adrian Maga

Session Sponsor: R Studio Session Slides

5:30am - 5:50am Talk-Video Regular Talk

Easy R Markdown reporting with chronicle

Philippe Heymans Smith

5B - Mathematical/Statistical Methods

Location: The Lounge #talk_math_stats
Chair: Marcela Alfaro Cordoba Zoom Host: Nick Spyrison Zoom Host (R): Olgun Aydin

1:45am - 2:05am Talk-Video Regular Talk

maars: Tidy Inference under misspecified

statistical models in R

Riccardo Fogliato, Shamindra Shrotriya, Arun Kumar Kuchibhotla

2:05am - 2:25am

Talk-Live Regular Talk

Mixed Integer Evolutionary Strategies with

"miesmuschel" Martin Binder

2:25am - 2:45am Talk-Video Regular Talk

Here is the anomalow-down!

Sevvandi Kandanaarachchi, Rob J Hyndman

6B - R in Production 1

Location: The Lounge #talk_r_production_1
Chair: Emi Tanaka Zoom Host: **Jyoti Bhogal** Zoom Host (R): **Nick Spyrison**

Session Sponsored by: cynkra Session Slides

5:30am - 5:50am sponsored-live Sponsored Talk Big Memory for R

Jingchao Sun, Chris Kang, Austin Gutierrez

7:00am

7:15am 7:15am

8:15am

8:15am

9:15am

9:15am

10:45am

5:50am - 6:10am 5:50am - 6:10am Talk-Video Talk-Live Regular Talk Regular Talk virgo: a layered interactive grammar of **Bridging the Unproductive Valley: Building Data Products Strictly Without Magic** graphics in R Maximilian Held, Najko Jahn Stuart Lee, Earo Wang 6:10am - 6:30am 6:10am - 6:30am Talk-Video Talk-Live Regular Talk Regular Talk New displays for the visualization of Data science serverless-style with R and multivariate data in the tourr package **OpenFaaS** Ursula Laa Peter Solymos 6:30am - 6:50am Talk-Live Regular Talk plotVR - walk through your data **Philipp Thomann** Location: The Lounge #lobby Keynote: Research software engineers and academia Location: The Lounge_#key_seibold Chair: Dorothea Hug Peter Zoom Host: Adrian Maga Zoom Host (R): Nick Spyrison Keynote Talk Heidi Seibold RechaRge 3 Location: The Lounge #announcements
Chair: Marcela Alfaro Cordoba Yoga for the Spine + Stretching 7A - Ecology and Environmental Sciences 7B: Statistical modeling in R 7C - Teaching, Automation and Location: The Lounge #talk_ecology_environment Chair: Ulfah Mardhiah Location: The Lounge #talk_stats
Chair: Sevvandi Kandanaarachchi Reproducibility Location: The Lounge Zoom Host: Nick Spyrison #talk_teaching_automation_r Chair: Earo Wang Zoom Host: Adrian Maga Zoom Host (R): Olgun Aydin Zoom Host (R): Olgun Aydin Zoom Host: Jyoti Bhogal Zoom Host (R): Olgun Aydin Session Sponsor: Roche Session Slide Session Slide 9:15am - 9:35am 9:15am - 9:35am Talk-Video Talk-Live Regular Talk 9:15am - 9:35am Regular Talk Talk-Live **Probability Distribution Forecasts: Learning** Regular Talk startR: A tool for large multi-dimensional with Random Forests and Graphical data processing A semi-automatic grader for R scripts **Assessment** An-Chi Ho, Núria Pérez-Zanón, Nicolau Vik Gopal, Samuel Seah, Viknesh Jaya Kumar Moritz N. Lang, Reto Stauffer, Achim Zeileis Manubens, Francesco Benincasa, Pierre-Antoine Bretonnière 9:35am - 9:55am 9:35am - 9:55am Talk-Live Regular Talk Talk-Live 9:35am - 9:55am Regular Talk Talk-Live spaMM: an R package to fit generalized, Automating bespoke online teaching with R Regular Talk linear, and mixed models allowing for **Rhian Davies** grwat: a new R package for automated complex covariance structures separation and analysis of river hydrograph François Rousset, Alexandre Courtiol 9:55am - 10:15am Talk-Video Timofey Samsonov, Ekaterina Rets, Maria Regular Talk Kireeva 9:55am - 10:15am Extend the functionality of your R Talk-Live Regular Talk 9:55am - 10:15am Markdown documents Talk-Video The one-step estimation procedure in R Christophe Dervieux Regular Talk Alexandre Brouste, Christophe Dutang Using R6 object-oriented programming to 10:15am - 10:35am Talk-Video

10:15am - 10:35am

The R Package stagedtrees for Structural

Learning of Stratified Staged Trees

Federico Carli, Manuele Leonelli, Eva

Riccomagno, Gherardo Varando

Talk-Video Regular Talk

build agent-based models

Liam Daniel Bailey, Alexandre Courtiol

10:15am - 10:35am Talk-Live Regular Talk

Climate Forecast Analysis Tools Framework: from the storage to the HPC to get reproducible climate research results and services

<u>Núria Pérez-Zanón</u>, An-Chi Ho, Francesco Benincasa, Pierre-Antoine Bretonnière, Louis-Philippe Caron, Chihchung Chou, Carlos Delgado-Torres, Llorenç Lledó, Nicolau Manubens, Lluís Palma

Music, networking channel and raffles. To end the day in a relaxing way

https://www.conftool.org/user2021/index.php?page=browseSessions&print=export&mode=table&presentations=show

11:45am

10:45am

Date: Friday, 09/July/2021

Regular Talk

taught with R and Shiny

Patricia Martinkova

Computational aspects of psychometrics

12:30pm 1:30pm

Keynote: The R-universe project Location: The Lounge #key_ooms Chair: Heather Turner Zoom Host: Yuya Matsumura

Zoom Host (R): Priyanka Gagneja

Session Slide

Keynote Talk Jeroen Ooms

Break

1:30pm

Location: The Lounge #lobby

1:45pm

1:45pm

3:15pm

8A - Statistics and Bioinformatics Location: The Lounge #talk_stats_bioinformatics Chair: Leonardo Collado Torres

Zoom Host: Priyanka Gagneja Zoom Host (R): Aditi Shah Session Sponsor: Roche Session Slides

1:45pm - 2:05pm Talk-Video Regular Talk

MolEvolvR: Web-app and R-package for characterizing proteins using molecular evolution and phylogeny

Samuel Z Chen, Lauren M Sosinski, John B

Johnston, Janani Ravi

2:05pm - 2:25pm Talk-Live Regular Talk

Using R to Empower a Precision Dosing Web Application

Gergely Daroczi

2:25pm - 2:45pm Talk-Video Regular Talk

Visualization of highly-multiplexed imaging data with cytomapper

Nils Eling, Nicolas Damond, Tobias Hoch, Bernd Bodenmiller

2:45pm - 3:05pm sponsored-live Sponsored Talk

Analyzing Clinical Trials Data using R for **Exploratory and Regulatory Analyses**

Adrian Waddel 3:15pm

Chair: Sara Mortara

Chair: Marcela Alfaro Cordoba 4:15pm

Keynote: Communication - elevating data analysis to make a real impact 4:15pm

Location: The Lounge #key_communication Chair: Federico Marini

5:45pm Zoom Host: Aditi Shah Zoom Host (R): Balogun Stephen

Keynote Talk Catherine Gicheru, Katharine Hayhoe

5:45pm RechaRge 4

Chair: Marcela Alfaro Cordoba

Chair Yoga 6:45pm

6:45pm Incubator: Expanding the R community in the Middle East and North Africa (MENA) 7:45pm

Location: The Lounge #incubator_mena Chair: Batool Almarzouq

Zoom Host: Pamela Pairo Zoom Host (R): Aditi Shah

Batool Almarzouq, Mariam Almarzouq, Hedia Tnani, Mouna Belaid, Kamila Benadrouche, Haifa Ben Messaoud

7:45pm **Break**

Location: The Lounge #lobby

8:00pm

9:30pm

8:00pm 9A - R in production 3

Location: The Lounge #talk_r_production_3 Chair: Jennifer Bryan Zoom Host: Aditi Shah Zoom Host (R): Pamela Pairo Session Sponsor: Roche

9B - Community and Outreach 2

Location: The Lounge #talk_community_outreach_2 Chair: Stefanie Butland Zoom Host: Yuya Matsumura

Session Slide

8B - R in Production 2

Location: The Lounge #talk_r_production_2 Chair: Zhian N. Kamvar Zoom Host: Pamela Pairo Zoom Host (R): Yuya Matsumura Session Sponsor: Appsilon

Session Slides

1:45pm - 2:05pm Talk-Live Regular Talk

Shiny PoC to Production Application in 8 steps

Marcin Dubel

2:05pm - 2:25pm Talk-Live Regular Talk

Reliably Reproducible Project Packages

Alex Kahn Gold

2:25pm - 2:45pm Talk-Live Regular Talk

Binary R Packages for Linux: Past, Present and Future

Iñaki Ucar, Dirk Eddelbuettel

8C - Statistical modeling & Data Analysis 1

Location: The Lounge #talk_stats_data_analysis_1 Chair: Liz Hare Zoom Host: Rachel Heyard Zoom Host (R): Balogun Stephen

1:45pm - 2:05pm Talk-Video Regular Talk

fairmodels: A Flexible Tool For Bias **Detection, Visualization, And Mitigation** Jakub Wiśniewski, Przemysław Biecek

2:05pm - 2:25pm Talk-Video Regular Talk

DoubleML - Double Machine Learning in R Philipp Bach, Victor Chernozhukov, Malte S. Kurz, Martin Spindler

2:25pm - 2:45pm *Talk-Video* Regular Talk

copent: Estimating Copula Entropy and Transfer Entropy in R

Jian MA

Incubator: Stop reinventing the wheel: R package(s) for conference and abstract management

Location: The Lounge #incubator_conference_abstract
Chair: Matt Bannert

Chair: Janani Ravi

Zoom Host: Balogun Stephen Zoom Host (R): Yuya Matsumura

Incubator

Matthias Bannert, Janani Ravi

9C - Statistical modeling and data analysis 2

Location: The Lounge #talk_stats_data_analysis_2

Chair: Balasubramanian Narasimhan Zoom Host: Balogun Stephen

Session Slides 8:00pm - 8:20pm 8:00pm - 8:20pm Talk-Video Regular Talk 8:00pm - 8:20pm Talk-Video-NE Regular Talk Talk-Video Regular Talk bssm: Bayesian Inference of Non-linear and Using R in Latin America: the great, the Production Metrics for R with the Non-Gaussian State Space Models in R good, the bad, and the ugly 'openmetrics' Package Virginia A. García Alonso, Paola Corrales, Claudia A. Huaylla, Andrea Gómez Vargas, Joselyn Chávez, Denisse Fierro Arcos Jouni Helske, Matti Vihola **Aaron Jacobs** 8:20pm - 8:40pm Talk-Video Regular Talk 8:20pm - 8:40pm sponsored-live Sponsored Talk 8:20pm - 8:40pm Talk-Live bnmonitor: Checking the Robustness and Regular Talk Automating business processes with R Sensitivity of Bayesian Networks Frans van Dunné r-community.org: a central community Rachel Wilkerson, Manuele Leonelli, Ramsiya infrastructure for R Ramanathan CHIBUOKEM BEN UBAH, RICK PACK, MEET 8:40pm - 9:00pm sponsored-live BHATNAGAR 8:40pm - 9:00pm Sponsored Talk Talk-Live RStudio Managed Workbench -Regular Talk 8:40pm - 9:00pm Talk-Live Regular Talk FLAME: Interpretable Matching for Causal Patrick Schratz Inference CovidR and rmdgallery: A streamlined 9:00pm - 9:20pm Vittorio Dominic Orlandi, Sudeepa Roy, Cynthia process for collecting community sponsored-live Sponsored Talk Rudin, Alexander Volfovsky contributions in a gallery website Riccardo Porreca, Francesca Vitalini A little bit about RStudio Joseph Rickert 9:00pm - 9:20pm Talk-Live Regular Talk How open-source and R enable state-of-theart media production Eric Nantz **Closing and Awards**

9:30pm 11:30pm

Location: The Lounge #announcements Chair: Andrea Sánchez-Tapia

Chair: Marcela Alfaro Cordoba

Zoom Host: Pamela Pairo
We will announce awards for presentations and recognize the work of those who have helped the R community grow. We will also have a short presentation about the next useR!