



## November 2018

CSDA's research and analytics tools are used by local and international agencies to support smart policy and sound decision-making in areas including health and social welfare. This issue: MyDay survey of trainee doctors in Wessex completed; Douglas County's child welfare predictive risk model due to be implemented in January 2019; New Zealand "Algorithms in the Public Sector" conference in December.

## CSDA Team News

CSDA Co-Director **Rhema Vaithianathan** won an individual research excellence award at the 2018 Auckland University of Technology Excellence Awards in October – congratulations Rhema!

**Julie Sandilands**, who is currently completing her Master of Business in Economics at Auckland University of Technology, recently joined CSDA as a research assistant.

Congratulations to our research assistant **Nic Watson** who has secured a summer internship at Motu, an economic and policy research institute in Wellington, NZ.

We recently farewelled research fellow **Oleksandr Fialko**, who is now working as a data scientist in the private sector and research fellow **Benedicte Rouland** who has returned to her position as a senior lecturer at the University of Nantes, France, after a two-year fellowship at CSDA.

Find out more about CSDA team [here](#).

## Meet the AUT Students Working at CSDA

A new appreciation for the role of data analytics in improving people's lives has been a revelation for one of CSDA's recent recruits.

Shae Reichfeld joined CSDA as a communications intern and says she has found it incredibly motivating to work with a team so thirsty for knowledge.

"My biggest takeaway so far is how relevant this work is to our civic life."

For Nic Watson, who recently joined CSDA as a research assistant, his role has given him new insights into the intensive ethics process and how critical it is for researchers.



*From left: Shae Reichfeld, Nic Watson and new research assistant Julie Sandilands at CSDA.*

“The ethics process involved in proposing a research project at AUT is comprehensive. Spending weeks at a time going through the process of making sure that every check is made, and every risk is addressed, has made me realise just how important and firmly supported ethical research is.”

[Read the full story here.](#)

## Research Insights

### **Growing Up in New Zealand**

In September Matt Walsh, Sophie Joyce, Rhema Vaithianathan and Tim Maloney completed their research on Adverse Childhood Experiences (ACEs) and protective factors using the Growing Up in New Zealand (GUiNZ) longitudinal study. The project, “Protective factors of children and families at highest risk of adverse childhood experiences”, was funded by the Children and Families Research Fund (Ministry of Social Development). It identified the relationship between the mother and her partner as an important protective factor for child outcomes, suggesting that there may be value in evidence-based policies and programmes designed to strengthen that relationship. The Ministry will publish final reports in the coming month – watch our website for details.

### **Wessex Trainee Doctors’ Wellbeing Survey**

Together with our research partners from Health Education England (HEE) in the Wessex region, University of Southampton, City, University of London, and the University of Zurich, CSDA has completed the survey on the workplace wellbeing of trainee doctors in Wessex. More than 500 doctors training across all medical specialities took part in the survey in July and August, a response rate of more than 25%. Researchers collected data using ‘MyDay’, an internet-based tool created by CSDA to measure the experience of workers in their day-to-day activities. The research team is looking forward to sharing high-level findings with participants and leadership in Wessex in November and expects to publish detailed results in several papers next year.

### **Douglas County Child Welfare predictive risk model almost ready to go live**

The Douglas County Child Welfare predictive risk model (PRM) built by CSDA will be implemented in Douglas County, Colorado (United States) as a randomised controlled trial (RCT) in January 2019. Known as the Douglas County Decision Aide (DCDA), the tool will support call screening staff who are required to decide whether referrals for alleged child maltreatment should be investigated. The DCDA relies on child welfare and public benefit data. Its impact on decision quality will be measured via an independent, year-long RCT.

### **Collaborating with new US child maltreatment research centre**

CSDA Co-Director Rhema Vaithianathan will be collaborating with the newly-funded Center for Innovation in Child Maltreatment Policy, Research and Training (CICM) at Washington University of St. Louis. The CICM will focus on long-term child health outcomes and aims to identify high-risk markers for child abuse that health professionals could use. The CICM is one of three specialised centres for child maltreatment research recently funded by the National Institutes of Health, with a total investment of nearly USD\$21 million over five years.

### **Indigenous Social and Emotional Wellbeing Project – Australia**

Rhema Vaithianathan is an associate investigator on a newly funded Australian study about Indigenous wellbeing. “Against the odds: Understanding the factors influencing wellbeing among Indigenous youth in the Northern Territory (2018-2023)” is led by Associate Professor Stefanie Schurer from The University of Sydney. This five-year study will explore Indigenous youth wellbeing using both linked administrative data and fieldwork, while training Indigenous research capacity. The project is funded out of a National Health and Medical Council Targeted Call.

## Events and outreach

*To help advance the understanding and effectiveness of social data analytics, our researchers continue to share and exchange knowledge with local and international colleagues and agencies:*

### August

CSDA collaborator, Anna Brown (Toi Aria, Massey University, Wellington, NZ), presented interim results from the “Community Perspectives on the use of algorithms by the Government in NZ and the USA” project at the **SIGKDD Conference on Knowledge Discovery and Data Mining in London**.

### September

Rhema Vaithianathan visited **Santiago, Chile, with support from the New Zealand Embassy**, to share details of CSDA’s predictive risk modelling work with government officials and frontline staff who work with vulnerable children.

Rhema presented PRM research at the **Strengthening Child Safety and Wellbeing through Integrated Data Solutions Conference**, sponsored by Pennsylvania State University’s Child Maltreatment Solutions Network.

Rhema also led an [Australian roundtable about the use of predictive analytics for positive impact](#), hosted by the Institute for Social Science Research (ISSR) **at the University of Queensland**.

Matt Walsh shared CSDA’s new research on Adverse Childhood Experiences (ACEs) at a [Child Wellbeing Research Seminar](#) hosted by the **Ministry of Social Development in Wellington**.

### October

Rhema Vaithianathan presented with partners from Douglas County Department of Human Services at the [Alliance for Strong Families and Communities National Conference in Denver, Colorado](#).

Additionally, Rhema attended **CityLab Detroit** to speak on panels about the use of predictive risk modelling for child welfare and homelessness prevention.

Rhema addressed a **community meeting** about the outcomes of the California Child Welfare Predictive Risk Model proof of concept project **in Sacramento, CA**.

Rhema visited the **Oxford Internet Institute, University of Oxford** where she gave a presentation on predictive risk modelling in the social sector.

### Coming Up

In November, Rhema Vaithianathan will present a Child Welfare Workshop at the **Alan Turing Institute**, the United Kingdom's national institute for the data sciences.

Later in the month, CSDA co-director Tim Maloney will speak on the **current and future use of data in Government** at an Auckland [seminar](#) hosted by the Auckland IPANZ New Professionals network.

In late November, CSDA research fellow Diana Benavides-Prado will present at the 10<sup>th</sup> annual [Citizen Security Week in Santiago de Chile](#), an annual event organised by the Inter-American Development Bank. Diana will discuss predictive risk modelling to support screening decisions in child maltreatment.

CSDA will co-host a [free public lecture](#) from German algorithm ethics expert **Lorena Jaume-Palásí**: “Decision-Making: Human vs Machine” in Auckland, in December, together with Stats NZ.

CSDA, together with the University of Auckland and agency partners, will co-host two events focused on **NZ Algorithms in the Public Sector** - an invitation-only roundtable in Auckland followed by a day-long conference in Wellington.

*We have sent you CSDA eNews because you have previously shown interest in our work. If you would prefer not to receive this newsletter, please let us know.*

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