

LUKE KERSHAW



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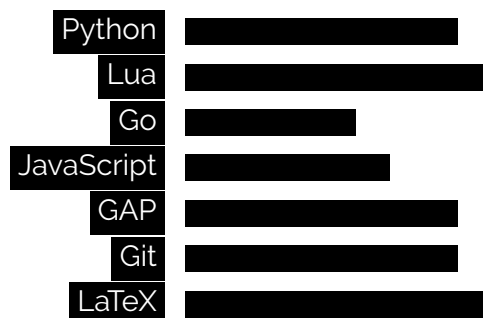
luke-kershaw



github.com/l-kershaw

SUMMARY

Current final year PhD student in Mathematics at the University of Bristol. Using custom developed software for data generation and hypothesis testing to research representation theory. Experienced in problem solving across research and industry using programming and data science. Highly organised and able to work effectively in a team or individually. Looking for software development roles.



EDUCATION

- Sep 2019 – Jun 2023 **Doctor of Philosophy (PhD), Mathematics** University of Bristol, UK
expected
Research Focus: Representation Theory of Finite-Dimensional Algebras
- Oct 2015 – Jul 2019 **Master of Mathematics (MMath), Mathematics** University of Warwick, UK
First Class *Final Mark:* 83%
Research Project: Tropical Geometry

RECENT OPEN SOURCE WORK

- telescope.nvim (extensible fuzzy finder in Neovim)** nvim-telescope/telescope.nvim
Telescope is the de facto standard fuzzy finder for use within the Neovim text editor.
 - Enhance extendability of internal tools, while minimising technical debt. This led to an ecosystem of dozens of tools built upon the framework of telescope.
 - Standardise user configuration options, improving understandability and expanding the ability of users to personalise the tool to fit their preferences.
 - Review pull requests and handle bug reports (since 2021, when I became a maintainer).*Lua*
- SBStrips (computational package for mathematical researchers)** jw-allen/sbstrips
SBStrips is a mathematical library for computations involving special biserial algebras.
 - Improve efficiency of existing code, by identifying and removing unnecessary calculations.
 - Expand feature set; widening range of available computations and adding tools to develop and test new hypotheses.*GAP*
- Ergogen (ergonomic keyboard layout generator)** ergogen/ergogen
Ergogen automatically generates PCBs and cases for declaratively defined 2D keyboard layouts.
 - Expand test coverage to 100%, utilising the *Mocha* framework for testing JavaScript.
 - Contribute to documentation (using *docusaurus*) and improve user experience.
 - Fix bugs in the associated CLI tool and web-GUI.*node.js*

WORK EXPERIENCE

- | | |
|--|---|
| Jul – Aug 2019,
Jul – Aug 2018 | Data Engineer (previously Data Science Intern) AIMES Ltd, Liverpool, UK <ul style="list-style-type: none">• Create an automatic system for data collection and processing to aid in NHS funding applications.• Liaise with relevant stakeholders to identify key information required.• Effectively organise work to complete the project within strict deadlines. Python / SQL |
| Jul – Sep 2017,
Mar – Apr 2017,
Dec 2016 | Accounts Assistant Velocity Composites Plc, Burnley, UK <ul style="list-style-type: none">• Develop a demand analysis project to forecast changes in customer needs, and adjust internal production and procurement appropriately.• Communicate within the business to decide which information was relevant to calculations and decision making. VBA |
| Aug 2014 | Accounts Assistant Ultrasis Plc, London, UK <ul style="list-style-type: none">• Manage current and historical invoices, purchases and expenses. |

OTHER EXPERIENCE

- | | |
|--|---|
| Sep 2019 – Jun 2023
part time, expected | Postgraduate Representative Bristol School of Mathematics <ul style="list-style-type: none">• Effectively collate and communicate postgraduate issues to the Student Staff Liaison Committee.• Facilitate organisation of postgraduate events and initiatives. |
| Sep 2019 – Dec 2022
part time | Support Session Leader / Tutorial Leader Bristol School of Mathematics <ul style="list-style-type: none">• Present new mathematical ideas in a clear and rigorous manner.• Provide efficient feedback to written submissions and verbal questions.• Achieve consistent feedback scores of above 90%. |
| Jan – Sep 2020
part time | Conference Co-organiser Bristol School of Mathematics <ul style="list-style-type: none">• Organise in person conference for 60 people.• Adapt planned event to a virtual setting on short notice. |
| Sep 2016 – Apr 2019
part time | Supervisor / Peer Tutor Warwick Mathematics Institute <ul style="list-style-type: none">• Mentor and support 1st year students with all core modules.• Guide students in improving their mathematical and logical maturity.• Communicate technical concepts to an audience unfamiliar with them. |

HOBBIES

Cycling / Canoeing / Electronics / Woodworking / 3D printing / Reading