

# AIDAN SCANNELL

PhD Researcher

[www.aidanscannell.com](http://www.aidanscannell.com)  
[aidanscannell](https://github.com/aidanscannell)

[@scannell.aidan@gmail.com](mailto:scannell.aidan@gmail.com)  
[aidan-scannell-82522789/](https://www.linkedin.com/in/aidan-scannell-82522789/)

+44 787 558 3912

Bristol, UK



## EXPERIENCE

### Teaching Assistant

University of Bristol

Sept 2018 - Ongoing Bristol, UK

Alongside my PhD I have assisted teaching:

- Machine Learning COMS30007
- Robotic Systems COMSM0012
- Intelligent Information Systems EMATM0042

Communication Active Listening

### PhD Researcher

University of Bristol

Sept 2018 - Ongoing Bristol, UK

Researching data-efficient learning for the control of robotic systems. EPSRC Centre for Doctoral Training in Future Autonomous and Robotic Systems (FARSCOPE).

Probabilistic modelling Gaussian processes Variational inference  
Model-based reinforcement learning Optimal control

## PROJECTS

### Identifiable Mixtures of Sparse Variational Gaussian Process Experts

University of Bristol

Sept 2018 - Ongoing Bristol, UK

- Improving scalability in the Mixtures of Gaussian Process Experts model with Gaussian process based gating networks.
- Variational inference based on sparse GP approximations.
- [aidanscannell/mogpe](https://github.com/aidanscannell/mogpe)

GPflow TensorFlow Gaussian processes Variational inference

### Trajectory Optimisation in Learned Multimodal Dynamical Systems

University of Bristol

Sept 2019 - Ongoing Bristol, UK

- Learning multimodal probabilistic transition dynamics.
- Finds trajectories that 1) remain in a desired dynamics mode 2) avoid regions of the dynamics with high epistemic uncertainty.
- [aidanscannell/trajectory-optimisation-in-learned-multimodal-dynamical-systems](https://github.com/aidanscannell/trajectory-optimisation-in-learned-multimodal-dynamical-systems)

JAX Probabilistic geometries Optimal control

## SKILLS

Python TensorFlow GPflow JAX  
NumPy SciPy Matplotlib GPy

Java C++ MATLAB ROS

Git/GitHub LaTeX Org-mode

## EDUCATION

### Ph.D. in Bayesian Machine Learning for Robotic Control

University of Bristol

Sept 2018 - Ongoing

### M.Res. in Robotics & Autonomous Systems

University of Bristol

Sept 2017 - Sept 2018

- First Class Honours
- Extending BDI Agents to Model and Reason with Uncertainty

### M.Eng. in Mechanical Engineering

University of Bristol | First Class Honours

Sept 2012 - June 2016

- First Class Honours
- Graduated in top 10% of cohort

## ACHIEVEMENTS

Full Sporting Colours  
Awarded full colours for outstanding achievements in snowboarding.

Starting To Teach  
Acquired the knowledge and skills to establish myself as a confident, enthusiastic and effective teacher who is able to engage, encourage and develop students' learning.

Bristol Plus Award  
For undertaking a wide range of tasks to further enhance student skills - only 700 out of 23000 achieved this awards per annum.

# VOLUNTEERING

---

## Club Leader

### Code Club

📅 Dec 2017 - April 2018

📍 Bristol, UK

I collaborated with Code Club and Bristol Libraries to set up and run a Code Club for young people aged 9-13 at Junction 3 Library in Easton, Bristol.

Leadership

Teaching

---

## Technical Lead (Drivetrain)

### Formula Student

📅 Jan 2015 - Jan 2016

📍 Bristol, UK

Each year, as part of Formula Student, students design, build and race a single seat race car.

- Finished 2nd in the National Class 2 competition in 2013/2014, I was then selected as the Drivetrain lead.
- This role improved my communication skills as I was leading weekly presentations.
- I developed my leadership skills through setting realistic objectives, effectively allocating work to the appropriate team members and monitoring outcomes.

Teamwork

Leadership

Time Management

---

## Snowboard Captain

### University of Bristol Snowsports Club

📅 Jan 2014 - Sept 2015

📍 Bristol, UK

- Organised multiple weekly training sessions, demonstrating my ability to plan and run events smoothly.
- Negotiated competitive prices for a growing member base within an inherently expensive sport.
- Responsible for aiding the smooth running of the club and helping to organise the annual university ski trip, with circa 1500 participants, working under pressure to manage people in high stress situations.
- Awarded the 'Team of the Year' award and full colours for my performances and contributions to the sport.

Teamwork

Leadership

Time Management

# REFEREES

---

Prof. Arthur Richards

📧 University of Bristol

✉ Arthur.Richards@bristol.ac.uk

---

Dr. Carl Henrik Ek

📧 University of Cambridge

✉ che29@cam.ac.uk