Nishanth Kumar

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EDUCATION

BROWN UNIVERSITY
Sc.B in Computer Engineering
May 2021 | Providence, RI
Honors Candidate with focus on ML, AI and Robotics.
GPA: 3.94 / 4.0

THE INDIAN PUBLIC SCHOOL
Grad. Nov 2016 | Coimbatore, India
IB DP Valedictorian with perfect 45

LINKS

Github:// **nishanthjkumar**
Google Scholar:// **Nishanth Kumar**
LinkedIn:// **nishanth-kumar**
Twitter:// **@nishanthkumar23**

COURSEWORK

GRADUATE
Learning and Sequential-Decision Making (Intro to RL)
Topics in Collaborative Robotics
Computer Vision
Topics in 3D Vision and Deep Learning

UNDERGRADUATE
Image Understanding
Design of Computing Systems
Probability for Computing and Data Analysis
The Great Ideas in CS
Introduction to Computer Systems
Linear Algebra
Multivariable Calculus

SKILLS

PROGRAMMING
Over 5000 lines:
Python • LaTeX
Over 1000 lines:
C • Java • MATLAB • Verilog • Scala
Familiar:
Tensorflow • OCaml • Racket • Android • MySQL

ENGINEERING
Digital Circuit Design • CAD • Metalworking
3D Printing • Woodworking

MISC.
Copywriting • Public Speaking

EXPERIENCE

UBER ATG | Research Intern
May 2020 - August 2020 | Remote
- Led an independent research project on Active Learning to improve sample-efficiency and reduce data-labelling costs for a neural network model. Supervised by ATG Chief Scientist **Prof. Raquel Urtasun**.
- Full details under NDA. Conference publication in preparation.

PARAGON.SCHOOL | Co-Founder
Dec 2019 – Present | Providence, RI
- Help with college counselling and advice for ambitious high-school students, with a focus on international students

BROWN CS | Head Teaching Assistant
Sep 2019 – Dec 2019 | Providence, RI
- Managed a staff of 5 for **Prof. Michael Littman's** Graduate Level Reinforcement Learning course with 82 students
- Final projects that resulted in more than 20 acceptances to the 2019 NeurIPS Reproducibility Workshop

RESEARCH

HUMANS 2 ROBOTS LAB | Undergraduate Research Assistant
Sep 2017 Present | Providence, RI
- Advised by Professors **Stefanie Tellex**, **George Konidaris** and **Michael Littman**
- Lead projects and work collaboratively under other groups under the Brown Integrative General Artificial Intelligence (BigAI) initiative.

AWARDS AND HONORS

2020 Goldwater Scholar
2020 Heidelberg Laureate
2019 CRA Outstanding Undergrad Researcher Honorable Mention
2019 Machine Intelligence Conference 2019 Invited Speaker
2018 Ivy-League Undergrad Research Symposium 'Best Plenary Presentation'
2018 Hack@Brown 'Best Hardware Hack'
2017 YHack 'Best Finance Hack'
2015 One of 90 Regional Finalists for the Google Global Science Fair

SELECTED PUBLICATIONS

[1] N. Kumar, J. Chang, S. Hastings, A. Gokaslan, D. Romeres, D. Jha, D. Nikovski, G. Konidaris, and S. Tellex. Learning deep parameterized skills from demonstration for re-targetable visuomotor control. *arXiv preprint arXiv:1910.10628, in preparation*, 2019.

[2] N. Kumar, M. Fishman, N. Danas, S. Tellex, M. Littman, and G. Konidaris. Task scoping for efficient planning in open worlds (student abstract). In *Proceedings of the AAAI Conference on Artificial Intelligence*, volume 34, pages 13845–13846, 2020.

[3] E. Rosen, N. Kumar, N. Gopalan, D. Ullman, G. Konidaris, and S. Tellex. Building plannable representations with mixed reality. In *Proceedings of the 2020 IEEE/RSJ International Conference on Intelligent Robots and Systems*.