

# Anup Sathya Sai Kumar

anupsathya.com

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## EDUCATION

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### University of Chicago (Present)

Ph.D - Computer Science

- Advisor: Dr. Ken Nakagaki

Chicago, Illinois

September '22 - Present

### University of Maryland

M.Sc. - Human-Computer Interaction

- Thesis: "Enabling On-body Computing Using a Track-Based Wearable"
- Committee: Huaishu Peng (adv.), Niklas Elmqvist, Alex Leitch

College Park, Maryland

August '19 - May '21

### PES University

B.Tech. - Electronics & Communications Engineering

- Thesis: "Realtime On-chip Wireless Waveform Monitoring"
- Committee: Suresh Padmanabhan (adv.), R Mahadevan, TS Chandar

Bangalore, India

August '14 - May '18

## PUBLICATIONS

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### PEER-REVIEWED JOURNAL AND CONFERENCE PUBLICATIONS

- [2] Zeyu Yan\*, **Anup Sathya\***, Sahra Yusuf, Jyh-Ming Lien, Huaishu Peng, "Fibercuit: Prototyping High-Resolution Flexible and Kirigami Circuits with a Fiber Laser Engraver", *UIST '22: The 35th Annual ACM Symposium on User Interface Software and Technology* <https://doi.org/10.1145/3526113.3545652> [\*equal contribution]
- [1] **Anup Sathya**, Jiasheng Li, Tauhidur Rahman, Huaishu Peng, "Calico: Track Based Interactive and Relocatable Wearables with Fast, Reliable, and Precise Locomotion", *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (UbiComp 2022)* <https://doi.org/10.1145/3550323>

### POSTERS, DEMOS, EXTENDED ABSTRACTS (PEER REVIEWED)

- [4] Zeyu Yan\*, **Anup Sathya\***, Sahra Yusuf, Jyh-Ming Lien, Huaishu Peng, "Demonstration of Fibercuit: Techniques to Prototype High-Resolution Flexible and Kirigami Circuits with a Fiber Laser Engraver", *SCF '22: Proceedings of the 7th Annual ACM Symposium on Computational Fabrication* <https://doi.org/10.1145/3559400.3565583> [\*equal contribution]
- [3] Zeyu Yan, **Anup Sathya**, Pedro Carvalho, Yongquan Hu, Annan Li, Huaishu Peng, "Towards On-the-wall Tangible Interaction: Using Walls as Interactive, Dynamic, and Responsive User Interface", *CHI EA '21: Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems* <https://doi.org/10.1145/3411763.3451586>
- [2] **Anup Sathya**, Sowmiya Balaji, Amishi Gupta, Suresh Padmanabhan, "Realtime On-chip Wireless Waveform Monitoring", *IEEE 2018 International Conference on Advances in Computing, Communications and Informatics (ICACCI)* <https://doi.org/10.1109/ICACCI.2018.8554814>
- [1] **Anup Sathya**, Abhinav Goel, Suresh Padmanabhan, "Visual Positioning System for Automated Indoor/Outdoor navigation", *IEEE 2017 TENCN - IEEE Region 10 Conference* <https://doi.org/10.1109/TENCN.2017.8228008>

## TEACHING

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### University of Maryland

Teaching Assistant

- TA to Dr. Jennifer Golbeck for INST462 - Introduction to Data Visualization.
- Responsibilities included grading, office hours and project guidance.

College Park, United States

June '20 - August '20

## SELECTED WORK EXPERIENCE

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### University of Maryland

Assistant Web-Developer (Full-time)

College Park, United States

July '21 - Present

- Developing and maintaining 7 dynamic university-wide websites with 50k monthly visitors.
- Design, develop, test and maintain Drupal themes and layouts used across multiple websites.
- Develop and retro-fit open-source Drupal modules to fit University requirements.
- Previously a Graduate Assistant at a similar role with lesser responsibilities from August '19 to May '21.

### Freelance Designer

Web Design, Visual Design, Game Design

Remote

2013 - Present

- Built multiple websites, landing pages, portfolios and stationery.
- Designed posters and marketing material for ~150 events.
- Designed educational games/software commissioned by the European Union in collaboration with Kozminski University.

## SELECTED PRESS

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2022 **all3dp** Fibercuit Takes Electronic Prototype Creation to the Next Level.

**Hackster.io** Fibercuit Laser-Cuts Prototype PCBs and Forms 3D Kirigami Objects.

**Hackaday** Fiber laser your way to flexible PCB success.

**Hackster.io** How to “train” your sensor.

**itmedia.co.jp** 服に敷いた線路をシュッシュッポッポ 体中を移動する小型ロボット 健康状態をモニタリング

**Hackster.io (interview)** Huaishu Peng, Anup Sathya, Zeyu Yan // Hackster Café.

**Hackaday** The Calico Wearable Rides the Rails.

## HONORS AND AWARDS

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- Crerar Fellowship (\$5000)
- Daniels Fellowship (\$5000)
- Full tuition remission at the University of Maryland (~\$28000)
- Nominated for Graduate Assistant of the Year (top 2%)
- Travel Grants (~\$2000)
- Zonal winner and finalist at the National Robotics Championship, India.
- Served as a Lance Corporal for 2 years in the youth wing of the Indian National Armed Forces.
- Represented India as a youth leader at the 3rd Annual Youth Forum conducted by the Asian Development Bank.

## CONTINUING EDUCATION(MOOC)

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**Machine Learning, Stanford University, Coursera:** Course Grade: 98%. This course provided a broad introduction to machine learning, data-mining, and statistical pattern recognition. [Certificate](#)

## VOLUNTEER EXPERIENCE

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### Youth Development Programme (FSL India)

President & Board Member

Bangalore, India

February 2015 - May 2016

- Led a team of 7 to manage over 35 members.
- Engaged with around 2000 volunteers and participants over the course of a year to successfully execute 30 events.
- Chosen to represent India at D-SEE Manila, Philippines – funded by the Erasmus+ Program.

## REFERENCES

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**Dr. Ken Nakagaki:** Assistant Professor, University of Chicago, Illinois

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**Dr. Huaishu Peng:** Assistant Professor, University of Maryland, College Park

huaishu@umd.edu

**Dr. Tauhidur Rahman:** Assistant Professor, University of Massachusetts, Amherst

trahman@cs.umass.edu

**Dr. Rebecca Follman:** Senior Web Developer, University of Maryland, College Park

rfollman@umd.edu