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| **Aparajithan Venkateswaran** | | | |  | | | |
| [apara.vnkat@gmail.com](mailto:apara.vnkat@gmail.com) | | [www.aparavenkat.com](https://www.aparavenkat.com/) | | [github.com/AparaV](https://github.com/AparaV) | | (720) 520-2811 | |
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| **Education** | | | | | | | |
| **University of Washington** | | |  | | **Expected 2025** | | |
| Ph.D. in Statistics | | | | |  | | |
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| **University of Colorado Boulder** | | |  | | **May 2020** | | |
| B.S. in Computer Science, *summa cum laude* (with Honors)  B.S. in Applied Mathematics, *summa cum laude* (with Honors) | | | | | GPA: 4.000 | | |
| *Senior Thesis* (advised by Prof. Daniel Larremore):  “Understanding SpringRank through Random Utility Models, Identifiability and Online Updates” | | | | | | | |
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| **Experience** | | | | | | | |
| **Software Engineering Intern, Microsoft** | | | | | | | **May 2020 – Aug 2020** |
| * Intern in the Mixed Reality Team. * Designing and implementing indoor navigation and wayfinding from HoloLens surface reconstruction. * Working with Havok Physics Engine and Azure Spatial Anchors SDK. | | | | | | | |
| **Research Assistant, University of Colorado Boulder** | | | | | | | **Jan 2018 – Present** |
| * NSF funded REU working with Prof. Daniel Larremore on identifying structure in complex networks. * Developing mathematical models to monitor population densities in response to COVID-19 with Prof. Ryan Layer. * Developed mathematical tools to study ranking of nodes in complex networks. * Designed machine learning and mathematical models to segment and parse academic resumes. | | | | | | | |
| **Teaching Assistant, University of Colorado Boulder** | | | | | | | **Jan 2018 – May 2020** |
| * Teaching assistant for Chaotic Dynamics (CSCI 4446) in Spring 2020. * Course assistant for Discrete Structures (CSCI 2824) in Spring 2018. * Holding office hours; grading assignments; and designing new questions for assignments and exams. | | | | | | | |
| **Software Engineering Intern, Microsoft** | | | | | | | **May 2019 – Aug 2019** |
| * Intern in the Edge Experimentation Team. * Designed and implemented an internal tool from scratch to automate data collection from experiments. * Designed and implemented automatic reporting and strategies for interoperability between Chrome and Edge. | | | | | | | |
| **Research Assistant, University of Colorado Boulder** | | | | | **Sep 2017 – Dec 2017** | | |
| * Worked under Dr. Hanspeter Schaub on optical navigation and feature tracking in astronomical objects. * Developed a deep neural network to detect craters and designed an algorithm to track craters across time. | | | | | | | |
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| **Awards** | | | | | | | |
| **Outstanding Undergraduate for Academic Achievement** | | | | | | | **May 2020** |
| For graduating with the highest GPA (4.000) from the College of Engineering and Applied Sciences at CU Boulder. | | | | | | | |
| **Chancellor’s Recognition Award** | | | | | | | **May 2020** |
| For graduating with the highest GPA (4.000) from University of Colorado, Boulder. | | | | | | | |
| **Active Learning Award** | | | | | | | **May 2020** |
| For performing research, volunteering, and industry internships in the College of Engineering at CU Boulder. | | | | | | | |
| **Computer Science Discovery and Service Learning Award** | | | | | | | **May 2020** |
| For performing research (Discovery) and volunteering (Service) in the Computer Science department at CU Boulder. | | | | | | | |
| **INFORMS Award, Outstanding Winner – Mathematical Contest in Modeling (COMAP)** | | | | | | | **Apr 2019** |
| Winner of INFORMS Award, given to 6 of 36 winning teams. One of 36 winning teams out of 25,000 international teams. Modeled epicenters of the opioid crisis in five states in USA and suggested strategies to combat the problem. | | | | | | | |
| **Meritorious Winner (top 10%) – Mathematical Contest in Modeling (COMAP)** | | | | | | | **Apr 2018** |
| Modeled the cost of an individual’s privacy, in a free market, by considering the risks and benefits associated with sharing private information along with highly correlated nature of human data. | | | | | | | |
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| **Publications** | | | | | | | |
| 1. **A. Venkateswaran**, B. Palmer, J. Kailey-Steiner, “The Value of Identity: Measuring the Cost of Privacy”, *Colorado Journal of Applied Mathematics* pp. 1-22, (2018) | | | | | | | |
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| **Skills** | | | | | | | |
| **Languages** | Proficient in C/C++, Python; Experienced in MATLAB/GNU Octave, JavaScript | | | | | | |
| **Tools and Frameworks** | TensorFlow, NumPy, scikit-learn, SciPy, matplotlib | | | | | | |
| **Misc.** | Mathematical modeling, Probabilistic generative models, Parameter optimization | | | | | | |
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| **Volunteering** | | | | | | | |
| [**GitHub Campus Expert**](https://githubcampus.expert/)  Volunteering with GitHub to develop tech community around University of Colorado, Boulder | | | | | | | **Oct 2017 – May 2020** |
| [**Director of Logistics, HackCU**](https://team.hackcu.org/)  Head of logistics at student group that organizes hackathons, workshops and career fairs | | | | | | | **Sep 2016 – May 2020** |
| **Department Action Team, University of Colorado Boulder**  Addressing issues in the undergrad computer science curriculum with faculty and students | | | | | | | **Sep 2019 – Dec 2019** |