

VIVEK ADARSH

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EDUCATION **University of California, Santa Barbara**
Doctor of Philosophy (Ph.D.), Computer Science **Expected: June 2022**

University of California, Santa Barbara
Master of Science (M.S.), Computer Science **June 2018**

University of Pune
Bachelor of Technology (B.Tech), Electrical Engineering **June 2016**

PROFESSIONAL EXPERIENCE **Research Associate Intern - Hewlett Packard Labs** **Jun 2021 - Sep 2021**
Networking and Distributed Systems Lab
Project - SmartFabric: AI-Acceleration on the fly using DPUs

Graduate Research Assistant
University of California, Santa Barbara **Mar 2017 - Jun 2021**
Department of Computer Science

Research Associate Intern - Hewlett Packard Labs **Jun 2020 - Sep 2020**
Networked Systems Group
Project - SARAS: Intelligent Edge Acceleration using SmartNICs

Software Engineer Intern - LogMeIn Inc. **Jun 2018 - Sep 2018**
Predicting cloud infrastructure failures and automated troubleshooting using DeepLearning models.

Research Intern - EIGEN Technology **Jun 2015 - Aug 2015**
Application of DSR and LEACH protocols on wireless sensor nodes (SenseNuts).

Research Intern - NVIDIA Singapore **Jan 2015 - Apr 2015**
Automated extraction and conversion of unstructured video metadata to structured data (U2S) using parallel computing (Pascal architecture).

AWARDS & RECOGNITION

- 2nd Runner-up, New Venture Startup Competition **2021**
- Won the *Best in Class* competition among 400 interns at Hewlett Packard Enterprise (international competition) **2020**
- Dean's Fellowship for outstanding Ph.D. student, UCSB **2017**

PRESS & MEDIA COVERAGE

- *Millions of Americans can't get broadband because of a faulty FCC map. There's a fix.*
By Shara Tibken, CNET. February 19th 2021.
(CNET has the world's highest readership among Web news sites, with more than 200 million readers per month.)
Available here: <https://www.cnet.com/features/millions-of-americans-cant-get-broadband-because-of-a-faulty-fcc-map-theres-a-fix/>

- *Networking and Distributed Systems Lab's intern wins Best in Class for summer project.*

By Curt Hopkins, Hewlett Packard Labs. September 24th 2020.

Available here: <https://community.hpe.com/t5/Advancing-Life-Work/Networking-and-Distributed-Systems-Lab-s-intern-wins-Best-in/ba-p/7102384#>

PATENTS &
INVENTIONS

- **Directing Queries to Worker Nodes of a Cluster of a Container Orchestration Platform Distributed across a Host System and a Hardware Accelerator of the Host System**

Diman Zad Tootaghaj, Vivek Adarsh, Anu Mercian, Puneet Sharma.

Hewlett Packard Enterprise

US Patent Application – 17/222160

REFEREED
PUBLICATIONS

- [1] **Too Late for Playback: Estimation of Video Stream Quality in Rural and Urban Contexts**
Vivek Adarsh, Michael Nekrasov, Udit Paul, Alex Ermakov, Arpit Gupta, Morgan Vigil-Hayes, Ellen Zegura, Elizabeth Belding.
Proceedings of the Passive and Active Measurement Conference (PAM '21)
- [2] **Estimation of Congestion from Cellular Walled Gardens using Passive Measurements**
Vivek Adarsh, Michael Nekrasov, Udit Paul, Elizabeth Belding
IEEE Transactions on Mobile Computing.
- [3] **Coverage is Not Binary: Quantifying Mobile Broadband Quality in Urban, Rural, and Tribal Contexts**
Vivek Adarsh, Michael Nekrasov, Udit Paul, Tarun Mangla, Arpit Gupta, Morgan Vigil-Hayes, Ellen Zegura, Elizabeth Belding
Proceedings of the IEEE 30th International Conference on Computer Communications and Networks (ICCCN '21)
- [4] **A Tale of Three Datasets: Towards Characterizing Mobile Broadband Access in the United States**
Tarun Mangla, Esther Showalter, Vivek Adarsh, Kipp Jones, Morgan Vigil-Hayes, Elizabeth Belding, Ellen Zegura
Communications of the ACM (CACM)
- [5] **Packet-level Overload Estimation in LTE Networks using Passive Measurements**
Vivek Adarsh, Michael Nekrasov, Ellen Zegura, Elizabeth Belding.
Proceedings of the Internet Measurement Conference (IMC '19).
- [6] **#Outage: Detecting Power and Communication Outages from Social Networks**
Udit Paul, Alex Ermakov, Michael Nekrasov, Vivek Adarsh, Elizabeth Belding.
Proceedings of the World Wide Web Conference (WWW '20).
- [7] **MPTCP Performance over Heterogeneous Subpaths**
Vivek Adarsh, Paul Schmitt, Elizabeth Belding.
IEEE 28th International Conference on Computer Communication and Networks (ICCCN '19).

- [8] **Evaluating LTE Coverage and Quality from an Unmanned Aircraft System**
Michael Nekrasov, **Vivek Adarsh**, Udit Paul, Esther Showalter, Ellen Zegura,
Morgan Vigil-Hayes and Elizabeth Belding.
IEEE 16th International Conference on Mobile Ad Hoc and Sensor Systems
(MASS '19).
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INVITED TALKS

- **Decoding Cellular Walled Gardens**
Google Inc. (NetInfra Team) February 2020
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PROFESSIONAL
SERVICES

- Technical Program Committee,
ACM SIGCOMM Artifact Evaluation Committee 2021
 - External Reviewer, IEEE Wireless Communications and
Networking Conference (WCNC) 2021
 - External Reviewer, IEEE Wireless Communications Letters Journal 2020
 - Judge, SB Hacks VII (UCSB's Annual Hackathon Competition) 2021
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STUDENT
MENTORSHIP

- [Research Project] Edain: A Comprehensive Network Monitoring Suite
 - **Anurag Bansal** (BS, Computer Science, IIT Roorkee)
 - **Jitesh Jain** (BS, Computer Science, IIT Roorkee)
 - **Ria Elizabeth John** (BS, Computer Science, IIT Roorkee)
 - [Research Project] Quantifying Video Streaming Quality on Mobile Broadband
 - **David Weinflash** (MS, Computer Science, UC Santa Barbara)
 - MobiSys 2021 Mentorship Program
 - **Ashwin Shaji**
 - **Mallikarjun Reddy**
 - **Naman Jaju**
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TEACHING

- Introduction to Computer Networks (CMPSC 176A) Spring 2019
 - Computer Networking (CMPSC 176B) Winter 2019
 - Introduction to Computer Networks (CMPSC 176A) Fall 2018
 - Introduction to Computer Networks (CMPSC 176A) Spring 2018
 - Computer Networking (CMPSC 176B) Winter 2018
 - Introduction to Computer Networks (CMPSC 176A) Fall 2017
 - Advanced Topics in Internet Computing (CMPSC 176C) Spring 2017
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