
EDUCATION

- Doctor of Philosophy, Computer Science – Software Engineering** (Current GPA: 3.81/4.00) Expected May 2024
University at Albany, State University of New York
Thesis: Automated E2E testing for user-driven web-applications
Advisor: Prof. Mei-Hwa Chen
- Master of Science, Computer Science** Dec 2019
University at Albany, State University of New York
- Bachelor of Engineering, Information Technology** June 2017
University of Mumbai – Mumbai, India

PROFESSIONAL EXPERIENCES

- Visiting Instructor** – Department of Computer Science - Siena College – Loudonville, NY Jan 2023 – Present
- Design & Teach courses in Computer Science Introduction, Software Engineering (Fa23) & Web
- Teaching Assistant** - Software Engineering Course - University at Albany - Albany, NY Jan 2018 – Dec 2022
- Lab instructor for Software Engineering Graduate & Undergraduate courses
 - Design Lab Assignments, Supervise team projects
 - Teach multi-tier web development, DevOps, AWS, and testing tools
 - Co-teach concepts in Software Engineering, under the oversight of Prof Mei-Hwa Chen focusing on verification and validation & design patterns
- Research Assistant** - Software Engineering Research Lab - University at Albany - Albany, NY June 2018 – Dec 2022
- Thesis: Automated E2E testing for user-driven web-applications
I am working on improving the efficacy of software testing campaigns by taking an integrated approach towards test generation, based on historical usage and data access along with incorporating continuous learning based on real-time application operation in the field. My work focuses on testing modern web applications. The technique models the application in a holistic full-stack approach as Hierarchical Hidden Markov models and encompasses user behavior.
 - Project lead – software development team
I lead software developments for the lab pertaining to tools for academic research projects like the Knowledge Forum with Ontario Institute for Studies in Education and University of Toronto & Knowledge building data analytics - UAlbany
 - Assistant Researcher for regression test case selection algorithms & dynamic reliability prediction techniques
- Department Advisory Board Member** - Vidyalankar Institute of Technology - Mumbai, India Aug 2021 - Jul 2022
- Advise on the creation of directives for coursework design for the Department of Information Technology
 - Built framework to encourage, promote, and measure student research success.
- System Engineering Intern** - Prashant Advanced Medical Services Pvt. Ltd. - Jalgaon, India May 2016 – Dec 2016
- Developed applications to **automate data processing** and develop a central gateway for remote management
 - Devised **automatic software build systems**. Migrated ERP modules to the cloud – *Cloud Computing & AWS*

ACADEMIC ACCOMPLISHMENTS

- Recipient of The **Academic Advancement Grant** from the Graduate School, University at Albany – Albany, NY Dec 2019
- Published** novel technique for automated regression test selection by leveraging program invariants
- Chen, Y., **Chaudhari, N.**, & Chen, M. (2021). Context-Aware Regression Test Selection at Asia-Pacific Software Engineering Conference (*APSEC*) 2021
- Presented** software architecture for supporting recent software-based developments in knowledge building
- Chaudhari, N.**, Seth, K., Chen, M. Architecting Knowledge Forum to enable development, research & compliance at scale: at the Knowledge Building Summer Institute (*KBSI*) 2018, Toronto, Canada

LEADERSHIP

- Student Ambassador** - MedHacks John Hopkins University, Baltimore, MD Aug 2018
- Vice-Chair & Co-Founder** - Institute of Electrical and Electronics Engineers Chapter (IEEE), University at Albany, NY Aug 2017
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OUTSTANDING ACHIEVEMENTS

- Won the **Best use of blockchain & cryptography** award in **MedHacks** at the Johns Hopkins University Sep 2018
- Invited to present and build at the BCG-Digital Venture's Hacks Mobility April 2018
- India National Rifle Shooting Team** 2014-2015 & 2017
- Represented the country of India at 4 International Competitions and Championships
 - Set 4 new **National Records**, Won Multiple National & State level Medals
 - Recognized as a Renowned Shooter of India, by the National Rifle Association of India
- Discovered an exploit** in *Android 2.3*, MediaTek-based devices based on file systems Feb 2012
- Guide and "Member of Staff" at androidforums.com: built Android based OS for devices 2011-2014
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SKILLS & TECHNOLOGIES

- Python, JavaScript, Node.js, React.js, Angular.js, MongoDB, Java Spring, HTML, CSS, C/C++ (SEED Certified A+)
- Maharashtra State Certificate in Information Technology (MSCIT)
- Testing: selenium, WebDriver, Junit, jest, Robotium, Appium
- Tools: Git, GitLab, Gitlab CI/CD, Cloud Computing: Docker, AWS S3, AWS Elastic Beanstalk, AWS EC2, Minio