

David Domingo

✉ DaveedDomingo@gmail.com

🌐 DavidDomingo.com

🌐 DavidJDomingo

🌐 DaveedDomingo

EDUCATION

Rutgers University – School of Graduate Studies, *New Brunswick, NJ*

Ph.D. in Computer Science

Sept. 2018 – May. 2023(expected)

Advisor: **Dr. Sudarsun Kannan**

Rutgers University – School of Arts and Sciences, *New Brunswick, NJ*

B.S. in Computer Science

Sept. 2013 – May. 2017

RESEARCH EXPERIENCE

pFSCK: Accelerating File System Crash Recovery

Guide: **Dr. Sudarsun Kannan**, *Rutgers University*

Jan. 2019 – Present.

- Utilize modern parallel programming and adaptive scheduling techniques to exploit modern storage capabilities and reduce the runtime of modern file system checking and recovery for EXT file systems.
-

WORK EXPERIENCE

Rutgers University, *New Brunswick, NJ*

Teaching Assistant (Department of Computer Science)

Sept. 2018 – Present.

- Lead recitations as well as develop projects exploring various computer science topics such as Computer Assembly, Operating System Mechanisms, RPCs, Restful Web Services, and distributed computing frameworks such as MapReduce
- Courses include: CS419: Computer Security, CS417: Distributed Systems, CS416: Operating Systems Design, CS211: Computer Architecture

Rutgers University, *New Brunswick, NJ*

Instructor (Department of Computer Science)

May. 2020 – Aug. 2020

- Developed and presented lectures and materials covering topics around computer architecture such as computing components, C programming, assembly, digital logic, and caching
- Managed teaching assistants to assist with development of course projects and forum discussions
- Courses include: CS211: Computer Architecture

iCIMS, *Holmdel, NJ*

Software Engineer

Jan. 2018 – Aug. 2018

- Test Lead for iCIMS strategic integrations agile team (team of 5)
- Primarily used Java/Spring and Javascript/Node.js to develop and test internal integration services that communicated with iCIMS Recruit software
- Developed initial scalable test plans and approaches to allow for fast continuous integration and deployment
- Researched testing tools for Node.js that allowed for scalable development of automated test cases
- Led frequent discussions to ensure our architectural approach for our services will yield testable/verifiable features
- Aided project progress by expanding outside of test and developed integration service features alongside main developers
- Researched and architected approaches to handle user forwarding to create a seamless user interaction with microservices

IBM, *Durham, NC*

Software Developer Intern

June. 2015 – Dec. 2015

- Software Developer intern for IBM's Rational Team Concert source code management software which focussed on aiding the agile development of enterprise applications running on IBM's mainframe systems
 - Utilized Java and ANT scripting to develop various tools for project data migration for internal SCM integration efforts.
 - Carry out regression testing to verify proper functionality of vital software components throughout the agile development lifecycle
-

PUBLICATIONS

- [1] David Domingo and Sudarsun Kannan. pFSCK: Accelerating File System Checking and Repair for Modern Storage. In *19th USENIX Conference on File and Storage Technologies (FAST '21)*, 2021.
-

INVITED TALKS AND PRESENTATIONS

Linux Storage and Filesystems Conference (VAULT '20), *Santa Clara, CA*

Topic: *Accelerating Filesystem Checking and Repair with pFSCK*

February 2020

AWARDS AND GRANTS

- Travel Grant Recipient: **USENIX Conference on File and Storage Technologies (FAST '20)**
 - Travel Scholarship Recipient: **ACM Symposium on Operating Systems Principles (SOSP '19)**
 - ACM Student Research Competition Travel Award: **ACM Symposium on Operating Systems Principles (SOSP '19)**
-

TEACHING EXPERIENCE

Rutgers University, *New Brunswick, NJ*

Topic: Teaching Assistant for the Department of Computer Science

Sept. 2018 – Present.

CS211: Computer Architecture (Summer '19), CS416: Operating Systems Design (Fall '19, Spring '20),

CS417: Distributed Systems (Fall '18), CS419: Computer Security (Spring '19)

Rutgers University, *New Brunswick, NJ*

Topic: Instructor for the Department of Computer Science

May. 2020 – Aug. 2020

CS211: Computer Architecture (Summer '20)

ACADEMIC PROJECTS

Bitcoin Transaction Latency

Guide: Dr. Richard Martin, Rutgers University

Sept. 2017 – Dec. 2017

- Semester long project exploring the latency of the Bitcoin network by performing statistical analysis on public Bitcoin transaction data.

Distributed Social Networking

Guide: Dr. Naftaly Minsky, Rutgers University

May. 2017 – Aug. 2017

- Independent study exploring Social Network Analysis Theory and Distributed Computing models to determine a feasible distributed social networking model utilizing Moses middleware developed at Rutgers University.
-

SKILLS & OTHERS

Programming Languages: C/C++, Java, Python, JavaScript, MySQL, Matlab, Shell, Assembly

Markup Languages: HTML, CSS, XML, Markdown, L^AT_EX

Frameworks: Hadoop, MapReduce, Spark, Spring, Node.js, Flask, Nvidia CUDA, OpenCL

Development Tools: Git, Maven, Gradle, Docker, GDB, QEMU, Valgrind, Intel VTune

Software and Applications: Microsoft Office, Adobe Photoshop
