

PRADYUMNA SHOME

pradyumna.shome@gmail.com · +1 (217) 819-8119 · pradyumnashome.com · github.com/PradyumnaShome

EDUCATION

University of Illinois at Urbana-Champaign (UIUC)

B.S. Computer Science, Grainger College of Engineering

Champaign-Urbana, IL

August 2017 - May 2021

Relevant Graduate / Upper Division Coursework: Computer Security I, II (CS 461, CS 463), Distributed Systems (CS 425), Machine Learning [PhD] (CS 446), Virtual Reality (CS 498 VR), Combinatorics (CS 413), Senior Thesis (CS 499)

Achievements: Malwarebytes Cybersecurity Scholarship • 3 × Illinois Engineering Achievement Scholarship • Kleiner Perkins Engineering Fellowship Finalist • Edmund J. James Scholar • Forbes Under 30 Scholar • CS Outstanding Course Assistant Award (5 out of ~600)

EXPERIENCE

Facebook

Incoming Software Engineering Intern

Seattle, WA

September 2020 - December 2020

FPSG, Security and Privacy Research at Illinois

Research Assistant — Advisor: Prof. Christopher W. Fletcher

Urbana, IL

August 2019 - Present

- Discovering processor optimizations vulnerable to micro-architectural side-channel attacks
- Using dynamic information flow tracking (DIFT) to find Worst Case Execution Time (WCET) of a program, based on branch and value predictor state

Salesforce

Software Engineering Intern, Records Experience, Platform Cloud

San Francisco, CA

June 2019 - August 2019

- Created recommendation system for automatic test case suggestions; reduced 13 work days per sprint planning session
- Developed UI for Einstein Modeling's first Business Card Scanner, that used OCR and NER
- Ideated and built intern-matching social app that helps bolster personal connections and surfaces common interests.

Virtusa

Software Engineering Intern, Media & Content Division

New York, NY

July 2018 - August 2018

- Created serverless cloud app and data lake that enabled semantic and fine-grained video search through time series analysis on computer vision data
- Implemented reference business intelligence (BI) tool, using NLP generative models (LDA, NTM) to gain insights on social media reactions to popular films and TV shows

HackIllinois

Systems Staff

Urbana, IL

April 2018 - February 2019

- Developed Go microservices to enable user authentication, authorization, event registration, and notifications via mobile app clients, including CI / CD pipeline, using MongoDB for persistence
- Built features such as user mocking, OAuth single sign-on, multi-tier decision review, templated mail, and created QR code scanner in Android app to manage event check-in and track participant statistics for meals and mini-events

OTHER RELEVANT EXPERIENCE

- **Leadership:** Director, Web Team, Reflections | Projections Technology Conference
- **Teaching:** Lead Course Assistant, Illinois CS 241: System Programming • Section Leader, Stanford CS 106A + Harvard CS 50 • Course Assistant, Illinois CS 233: Computer Architecture
- **Research:** Research Assistant, Blender Lab, NLP Research at Illinois

TECHNICAL SKILLS

- **Programming Languages:** Python, Go, Java, C, C++, Kotlin, HTML, CSS, JavaScript
- **Tools + Frameworks:** Cloud (AWS, Firebase, Travis, Serverless, Docker); Databases (MongoDB, MySQL); Web (React, Node.js, Web Components); Version Control (Git, SVN); Machine Learning (PyTorch, Scikit-learn, NumPy); Misc. (Intel VTune)

Last updated: June 12, 2020.