

# PRADYUMNA SHOME

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## EDUCATION

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### University of Illinois at Urbana-Champaign (UIUC)

*B.S. Computer Science, Grainger College of Engineering*

Champaign-Urbana, IL

*August 2017 - May 2021*

*Kleiner Perkins Engineering Fellowship Finalist · James Scholar · Lead Course Assistant, CS 241: System Programming*

### Relevant Coursework:

*Graduate:* Machine Learning [PhD] (CS 446), Computer Security I, II\* (CS 461, CS 463), Distributed Systems\* (CS 425)

*Undergraduate:* Senior Thesis\* (CS 499), Virtual Reality\* (CS 498 VR), Combinatorics (CS 413), Algorithms and Models of Computation (CS 374), System Programming (CS 241), Numerical Methods (CS 357), 2 x Independent Study (CS 397)

## INDUSTRY EXPERIENCE

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### Facebook

*Incoming Software Engineering Intern*

Seattle, WA

*September 2020 - December 2020*

### Salesforce

*Software Engineering Intern, Records Experience, Platform Cloud*

San Francisco, CA

*June 2019 - August 2019*

- Created recommender system for automatic test case suggestions that reduced 13 engineering work days per spring 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
- Built features such as user mocking, OAuth single sign-on, multi-tier decision review, templated mail, error handling and CRUD (with MongoDB) to API, and created QR code scanner in Android app to manage event check-in and track participant statistics for meals and mini-events.

## ACADEMIC EXPERIENCE

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### FPSG, Security and Privacy Research at Illinois

*Research Assistant — Advisor: Prof. Christopher W. Fletcher*

Urbana, IL

*August 2019 - Present*

- Investigating the effects of dynamic overclocking and cache compression on memory access times.
- Using dynamic information flow tracking (DIFT) to find Worst Case Execution Time (WCET) of a program, based on elements of microarchitectural state.

### Blender Lab, NLP Research at Illinois

*Research Assistant — Advisor: Prof. Heng Ji*

Urbana, IL

*August 2019 - December 2019*

- Conducting literature survey on event schema induction from multi-{media, lingual} representations using GNNs
- Annotating videos for Yoga Robot to understand more about the problem space; learning more about Attention Models and Transformers

## TECHNICAL SKILLS

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- **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: February 25th, 2020.