PRADYUMNA SHOME

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

EDUCATION

University of Illinois at Urbana-Champaign (UIUC) Champaign-Urbana, IL
B.S. Computer Science, Grainger College of Engineering *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)

EXPERIENCE

Facebook Seattle, WA
Incoming Software Engineering Intern *September 2020 - December 2020*

FPSG, Security and Privacy Research at Illinois Urbana, IL
Research Assistant — Advisor: Prof. Christopher W. Fletcher *August 2019 - Present*
- Investigating the effects of dynamic overclocking and cache compression on memory access times.
- Building simulator to protect data leakage using dynamic information flow tracking (DIFT) tools.

Blender Lab, NLP Research at Illinois Urbana, IL
Research Assistant — Advisor: Prof. Heng Ji *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

Salesforce San Francisco, CA
Software Engineering Intern, Records Experience, Platform Cloud *June 2019 - August 2019*
- Created web app to automatically suggest test plans for a new user story, through natural language processing of the acceptance criteria, using JavaScript (ES2017), Apex, SOQL, Web Components, and Jest for unit tests
- Reduced 13 engineering work days spent manually compiling test plans per sprint planning session
- Developed UI for Einstein Modeling's first Business Card Scanner, that used OCR and Named Entity Recognition
- Ideated and built intern-matching social app using Python and Jinja, that helps bolster personal connections and surfaces common interests.

Virtusa New York, NY
Software Engineering Intern, Media & Content Division *July 2018 - August 2018*
- Created serverless cloud app and supporting data lake to model, process, and aggregate time series computer vision data for predictive analytics, using Python, AWS Lambda, Amazon API Gateway, and Amazon DynamoDB
- 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, using Boto 3, Amazon QuickSight, and Amazon SageMaker

HackIllinois Urbana, IL
Systems Staff *April 2018 - February 2019*
- Developed Go microservices to enable user authentication, authorization, event registration, and notifications via mobile app clients, including CI / CD pipeline (Travis, AWS CodePipeline, Amazon ECS).
- Added 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.

TECHNICAL SKILLS AND MISCELLANEOUS

- **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 2nd, 2020.