Rishov Dutta

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EDUCATION

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
BS in Computer Engineering
May 2019 | Urbana, IL
College of Engineering

LINKS

Github:// **rsdutta**
LinkedIn:// **rishovdutta**

COURSEWORK

UNDERGRADUATE
Computer Systems Engineering
Computer Architecture
Applied Machine Learning
Applied Parallel Programming
Artificial Intelligence
Cloud Computing
Algorithms and Models of Computation
Computer Security
Digital Systems Laboratory

SKILLS

LANGUAGES
Proficient:
C++ • C • Java • x86 Assembly
Python • Javascript • HTML • CSS
Familiar:
MATLAB • Swift • SQL • Verilog
Frameworks/Other
Vertx • Django • Apache Spark
Spring • Docker • Kubernetes
React/Redux • Angular • Unix

OTHER

AWARDS
2017
Operating System Design Competition Runner-Up
2016
HackIllinois Honorable Mention
2015
Eagle Scout

INTERESTS
Tournament Poker
Investing
Skiing
Backpacking

EXPERIENCE

BLACKROCK | Software Engineer
Jul 2019 – Present | New York, NY
- Created a new service to unify troubleshooting dashboard across 100+ clients using an asyncronous Java framework - Vertx. Used as the primary troubleshooting dashboard for Aladdin which provides near instantaneous results to users as to where trade orders are failing, etc.
- Developed a distributed caching service to reduce latency when computing compliance results during trade execution using Redis. Layered this service on top of existing workflows in C++ and Java.
- Created a portfolio simulation tool using Java and Angular to capture investing habits of portfolio managers and other users around the firm and is used daily by over 5,000 users worldwide

BLACKROCK | Software Engineering Intern
May 2018 – Aug 2018 | Princeton, NJ
- Developed applications using Java to report the AUM, cash flows, revenue, benchmarks, and other portfolio information to portfolio managers.

DECISIVE ANALYTICS CORPORATION | Machine Learning Intern
Jun 2017 – Aug 2017 | Arlington, VA
- Developed algorithms in Java to parse audio and video files to efficiently summarize them using natural language processing and differentiate the results based on semantic frames and role labeling
- Researched and implemented behavioral analysis algorithms in Python to create player tracks and visualize certain tendencies in games such as Dota 2 and Counterstrike for use by the United States Military

PROJECTS

RASPBERRY PI HOME SECURITY SYSTEM | Software Engineer
Apr 2019 – May 2019 | Urbana, IL
Engineered home security system using two cameras and a Raspberry Pi to monitor an area using motion tracking and face detection using OpenCV. Sends images of invader to user via email as well as uploads images to dropbox

FPGA LASER PAINTER | Hardware Developer
Apr 2018 – May 2018 | Urbana, IL
Created FPGA system which tracks a laser pointer using a camera and real time image processing for digit classification that allows users to paint on a virtual canvas

BLUEDRESS CAPITAL | Software Engineer
Jun 2017 – 2019 | Urbana, IL
Developed solutions using django, postgresql, and react/redux for the fund website with trade execution, stock comparison features, profit modeling, and overall fund performance. Also created a chatbot to respond to users' stock market queries using wit.ai for NLP

LINUX KERNEL | Software Engineer
Apr 2017 – May 2017 | Urbana, IL
Developed a Linux kernel which supports non-preemptive context switching, segmented memory protection, a simple read/write file system, valgrind/malloc, and drivers for keyboard input, text/audio output, and clock