

Summary

A driven Software Developer with experience in Java, Node.js, React.js/Redux, CI/CD pipelines, Docker, Kubernetes & Microservices. An automation enthusiast and researching in Machine Learning & Computer Vision.

Education

Stony Brook University

Masters of Computer Science, GPA - 3.88

Stony Brook, NY

Anticipated Graduation – May '18

Relevant Coursework: Analysis of Algorithms, Computer Vision, Machine Learning, Fundamentals of Computer Networks, Human Factors in Computation, Visualization, Network Security, Theory of Database Systems;

Research Experience

Graduate Student Researcher | [Human Interaction Lab](#)

Fall 2017

- A state of the art research on detection of dark patterns on websites using Computer Vision & Deep Learning;

Research Publications

Spring 2017

A Highly Resilient and Scalable Broker Architecture for IoT Applications

-- *Proceedings of IEEE Conference on Communication Systems & Networks (COMSNET 2018)*

Core Competencies

- **Proficient in:** Java, Python, Node.js, JavaScript, React.js, Docker, Kubernetes, PostgreSQL, Ruby, AWS, Redis, REST APIs;
- **Familiar with:** TensorFlow, OpenCV, Scikit-Learn, NumPy, C++, Clojure, MongoDB, React-Native, Rspec, Elastic Search, Shell;

Experience & Achievements

Stony Brook University, [CEWIT](#)

May '17 – Present

Graduate Assistant

- Gathering data from social networks of Schizophrenia patients, reinforcing them with data provided by their family, finding relevant contextual information and assisting the patients' clusters of relevant memories; (*TensorFlow, FaceNET, Python*)
- Designed, implemented and deployed a multi-tenant conference app ([NYSTAR](#)) along with its backend APIs. (*Node.js, SQL*)
- Slashed down deployment time 60% by automating deployments. (*Docker, docker-compose, Jenkins, Shell, Gitlab*);
- **Achievement:** Appreciation for driving nystar to production release on App Store and Google Play Store;

Quintype Inc.

Mar '16 - Jan '17

Full Stack Engineer

- Re-designed core product from a monolith to micro-services (*Clojure, Ruby on Rails, Express.js*);
- Built [gems](#) & modules that helped clients integrate with our APIs 55% faster (*Ruby, Node.js*);
- Built an RSS feed consumer pipeline to our publishing platform (*Clojure*);
- A real-time stock data streaming service that adds in as a plugin to client websites (*RxJS, websockets, Node.js, Redis*);
- **Achievement:** Received appreciation on effectively mitigating production issues on call and leading a team;

ThoughtWorks

Aug '14 - June '15

Software Consultant

- Developed core backend data driven services for an enterprise application [RedE](#) (*Ruby, PostgreSQL, Redis*);
- Refactored process transition module to state machines making it easier to maintain and add new changes;
- Migrated & Automated the deployment using AWS OpsWorks thus enabling *One-Click Deployments* in minutes;
- Data visualization dashboards using D3.js;

TCS Innovations Lab, Tata Research

Jan '13 - Aug '14

Solutions Developer

- Community engagement analytics, messaging, video chats using WebRTC as part of an Enterprise Social Networking product;

Selected Projects

Visual Odometry with Deep Recurrent Convolutional Neural Networks (CSE 527, Fall '17): (*Python, TensorFlow, CNN, RNN*)

- Deep Learning approach for Monocular Visual Odometry using Deep Learning; Inspired from the paper [DeepVO](#)

Computer Vision (CSE 527, Fall '17): (*Python, TensorFlow, OpenCV, C++*)

- Image alignment using Laplacian Blending & perspective warping; Image segmentation using SLIC super-pixels;
- Object detection using Kalman Filter & Optical Flow with pre-trained Viola Jones detector;

Network Security (CSE 508, Fall '17): (*C, C++, Python*)

- Developed plugboard proxy for secure SSH using AES in CTR mode; DNS spoof injector & detector; tcpdump clone;

Computer Networks (CSE 534, Spring '17): (*Java, Python*)

- Developed a program like Wireshark to compute throughput, flow & bandwidth; Built a custom DNS resolver;

[AlexaFitnessPal](#): Most Innovative Idea Award at Hack@CEWIT 2017

- An IoT device with an Alexa Skill with H/W sensors and using Machine Learning & Vision algorithms to detect workout quality;

Visualization (CSE 564, Spring '17): (*Python, Scikit-learn, numpy, D3, Deck.gl*)

- Identified the top 3 reasons & correlations for accidents from the NYC Accident data; Visualized it on a 3D map using deck.gl.

Uberstudies: (*Node.js, PostgreSQL*)

- Built an online real-time one-to-one tutoring platform to empower students for on-demand learning;