Shang Ke

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Education

NEW YORK UNIVERSITY

M.S. Computer Science **MAY 2020 – DEC 2021**

GPA: 3.95

B.A. Computer Science *with Mathematics Minor* **SEP 2017 - MAY 2020**

GPA: 3.71 Cum Laude | Dean's List

Coursework: Operating Systems, Artificial Intelligence, Distributed Web Applications, Data Analysis, Financial Information Systems, Risk Management in IT, Cloud Computing, Computer Networking, Big Data Processing, Machine Learning Systems, Information Security Privacy, Network Security, Application Security, Databases

Work Experience

NOMURA **JUN 2021 – AUG 2021**

Corporate Infrastructure Summer Analyst *New York*, NY

- Built Regression Testing system with RESTful APIs for trade report comparison during version control using Elasticsearch, Logstash, and Kibana stack with distributed aggregated data search capability
- Eliminated need for additional SQL database storage with intuitive direct system-to-system web app
- Integrated testing package with Zephyr to streamline and reduce Quality Assurance testing times by up to 87%

NYU COURANT INSTITUTE OF MATHEMATICAL SCIENCES **SEP 2020 – MAY 2021**

Course Assistant (Computer System Organization, Computer Security) *New York*, NY

- Designed practical computer security labs to teach students common cybersecurity vulnerabilities including buffer overflow, XSS scripting, and SQL injections
- Created GitCTF scripts for automated student submission grading on GitHub with Docker containers

SPLASH (SPLASHTHAT.COM) Event Marketing Software **MAY 2019 – AUG 2019**

Implementation Intern *New York, NY*

- Migrated clients' designs to new RSVP platform with more intuitive UI and features
- Integrated RSVP platform with Salesforce, Twitter, and Slack API through Zapier for greater client convenience
- Designed and coded Selenium Chrome bot with Python to automate testing of RSVP platform which caught four UI bugs while simulating client usage

Military Leadership Experience

SINGAPORE ARMED FORCES **FEB 2015 - DEC 2016**

Non-commissioned Officer | Military Rank: 3rd Sergeant | *Combat Position: Reconnaissance Commander*

- Trained and managed 108 soldiers in military drills, physical fitness, and overseas deployments and received the Best Unit Award from Brigade Colonel for best performance in the Brigade

Hackathons & Projects

Human Specific Logic CAPTCHA **MAY 2020 – MAY 2021**

- Designing a user-friendly method to proof human usage of web application while stopping bots accurately
- Utilizing human-friendly puzzle to deter Machine Learning circumvention (Monkey: Banana, Cat: Fish, Dog: Bone)
- Creating puzzles with multiple layers of logic that are intuitive for humans but difficult for ML models

Obstacle Visual Detector | Python, Node.js, Clarifai API, Webcam **MAY 2020 – DEC 2020**

- Improving computer-vision project which won 3rd place in NYU Superhack 2018
- Building Python Flask app that analyzes webcam footage to assist visually impaired people in navigation, object and color identification through audio feedback with latency below 0.3 seconds
- Training Clarifai custom ML model with labeled images to reach object recognition accuracy above 89%

HackMIT 2018 IBM Call for Code @ MIT **SEP 2018**

1st Place Winner | Python, SQLite, Javascript, IBM Watson NPL API, Twitter API, Google Graph

- Designed Python Flask app which analyzed live Twitter feeds during Hurricane Florence to plot accurate disaster heatmap using location data and sentimental analysis with high similarity to FEMA estimations
- Worked in a team to build a Watson AI Chatbot to communicate with victims using typed English

Skills

Programming:	Python, C/C++, Java, SQL, HTML, CSS, JavaScript
Libraries:	Node.js, Hadoop, Flask, Numpy, Selenium, Salesforce, Zapier, Docker, PostgreSQL, Elastic
Systems & Tools:	Ubuntu, CentOS, Windows, AWS, Azure, Git, Github
Foreign Languages:	Chinese, Korean