VICTOR LIN

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EDUCATION

Bachelor of Science, Computer Science Aug 2015 – May 2019
Bachelor of Arts, Statistics
University of Florida, GPA 3.84/4.0

INDUSTRY & RESEARCH EXPERIENCE

Software Engineer August 2019 – Present
Microsoft, Redmond, WA

- Team: Microsoft Security Response Center (MSRC) Engineering - provides internal tooling for security analysts to fight digital threats to our company
- Spearheaded deployment of 10+ Azure resources to various clouds in line with standards for the JEDI customer
- Implemented parser/converter translating 100+ production-level automation workflows from JSON to PowerShell script for a next-generation workflow engine
- Mitigated/resolved customer issues with our services during weekly on-call rotation
- Authored/organized user guides and internal team documentation (TSGs, SOPs) in Markdown format

Contributor March 2020 – Present
Serratus

- Designed+developed serratus.io, a web interface to explore earth's viruses based on petabase-scale sequencing results
- Built 70GB database of analysis results for public consumption using a parallelized AWS Lambda ingestion approach
- Extracted geospatial info from 2m+ BioSample submissions to create an interactive map at serratus.io/geo
- Created Flask API for connecting database to website
- Implemented code checks on 4 git repositories via GitHub Actions; automated deployments for website and API
- Authored/organized documentation hosted on GitHub repository wikis

Bioinformatics Research Assistant May 2016 – Aug 2019
Lab of Dr. Lei Zhou, University of Florida

- Identified significant mutation patterns in p53 pathway using dataset of 70m+ genome-wide mutations
- Created a Python package to parse and extract taxonomy data from hundreds of protein sequences in an object-oriented fashion
- Applied machine learning models and visualizations on thousands of genomic data entires

Teaching Assistant Sep 2017 – Dec 2017
EML 6934 (Python Programming), University of Florida

- Worked with instructor in structuring a new course with 30+ graduate students
- Covered Python basics, NumPy, pandas, Matplotlib, SciPy, scikit-learn

Research Intern Jun 2017 – Aug 2017
U.S. Army Research Laboratory, Adelphi, MD

- Developed Python script to parse data files and determine circuit design efficiency
- Facilitated development of efficient wideband power amplifiers for on-field transmitters
- Nominated by branch chief as outstanding intern for ARL fellowship

Software Development/IT Intern Jul 2015 – Jan 2017
Acceleration.net, Gainesville, FL

- Designed Flask web app for device backup to facilitate management of 30+ offsite devices
- Managed 10+ client websites using WordPress and Linux command line
- Utilized Git and Trac to coordinate efforts with co-workers

PROJECTS

serratus.io – Open-source, open-access project to uncover earth's viruses via cloud computing
serratus-summary-api – Serve Serratus summary data via a public API
serratus-summary-uploader – Parallelized parse+upload of Serratus files via AWS Lambda
biosample-sql – Extract geospatial metadata from BioSample XML, upload to public DB
p53-chip-seq-data – Machine learning and visualizations of lab-generated genomic data
uniprot-taxonomy – Python library for extracting taxonomy information from UniProt database

PUBLICATIONS

Sundaresan, V., **Lin, V.**, et al.
Significantly Mutated Genes and Regulatory Pathways in SCLC – A Meta-analysis. Cancer Genetics. 2017.

PREPRINTS

Edgar, R. C., Taylor, J., **Lin, V.**, et al.
Petabase-scale sequence alignment catalyses viral discovery. bioRxiv. 2021.