

David Hoffman

EXPERIENCE

Senior Software Engineer — Reveald

June 2022 - present (full-time) – Remote (Chicago, IL)

- Develop cybersecurity Exposure Analysis feature and Vulnerability Management feature utilizing PostgreSQL, Python, Redis, Django, and GraphQL
- Developed in-platform ticket feature using Python, GraphQL, Django, PostgreSQL, Redis, and React; synchronizes platform data bidirectionally with JIRA; saves \$85k license fees annually

Senior Software Engineer — DivIHN Integration for Deloitte

March 2021 - June 2022 (contract) – Remote (Chicago, IL)

- Developed automated document management system with Python utilizing APIs for HyperScience, Parascript, Tesseract, Google DocumentAI, and Amazon Textract
- Served as SCRUM Master (certified)

Senior Software Engineer, Writer, & Customer Support Engineer — PylmageSearch

May 2017 - March 2021 (contract) – Remote (Durham, NC & Chicago, IL)

- Authored 3-volume 1,200-page Python computer vision / artificial intelligence book and raised \$370K on Kickstarter.com in 30 days for the product launch
- Wrote 170+ hands-on Python, Computer Vision, and Artificial Intelligence tutorials
- Developed computer vision and artificial intelligence pipelines with traditional algorithms and convolutional neural networks (image classification, object detection, segmentation, regression, object tracking)
- Supported 15,000+ customers with customized VM, cloud, and bootable disk images
- Responded to 18,000+ computer vision questions via email, tickets, comments, and threads
- SCRUM Master (certified) and SCRUM Product Owner (certified) for 4-person team

Graduate Research Assistant — East Carolina University Computer Science Department

May 2016 - May 2017 – Greenville, NC

- Implemented and deployed Python map-reduce image processing code to a Cloudera hadoop cluster for handwriting recognition
- Instructor for Discrete Mathematics (60 undergraduate students); created lessons, quizzes, homework, and exams; submitted end-of-semester grades
- Awarded The Outstanding Computer Science Graduate Teaching Assistant 2016-2017

Software Engineer for Electrical Test Systems — Molex

May 2014 - May 2016 (full-time) – Little Rock, AR (on-premises)

- Developed high performance cable test machine software using Vector Network Analyzer (VNA) and Time Domain Reflectometer (TDR) hardware
- Implemented serial number traceability systems (laser etch, printed barcode labels) for global product line using Python and MySQL

Wireless Systems Engineer (Cellular & Radar) — Northrop Grumman

August 2011 - April 2014 (full-time) – Cherry Point, NC & Virginia Beach, VA

- Tested DRFM (Digital Radio Frequency Memory) jamming technology against Aegis radar
- Installed VSWR (Voltage Standing Wave Ratio) coax/antenna monitoring technology on east coast towers; developed LabVIEW software for data collection
- Conducted microwave path analysis between Navy tower sites
- Installed GSM/UMTS cellular sites and call/sms traffic generators for Navy jamming ops

EDUCATION

Masters of Science in Software Engineering — East Carolina University – 2017

Bachelors of Science in Computer Engineering — North Carolina State University – 2011

Bachelors of Science in Electrical Engineering — North Carolina State University – 2011

Contact

708-446-0955

drhoffma@gmail.com

<https://davidrhoffman.net>

SKILLS

Python

(16 years)

Flask, Django, REST API, GraphQL

Computer Vision & Image Processing

(7 years)

OpenCV, NumPy, Halcon, Vimba, Cognex, Microscan, scikit-image

Artificial Intelligence

(5 years)

Tensorflow, Keras, mxnet, PyTorch, scikit-learn

SCRUM

(6 years)

Scrum Master
Scrum Product Owner

Cloud

(8 years)

Amazon Web Services
Google Cloud Platform

Database

(4 years)

PostgreSQL, MySQL, MongoDB, Google Datastore

Containerization

(4 years)

Docker, Kubernetes

High Performance Computing

(4 years)

NVIDIA GPU, Hadoop

Networking

(13 years)

Cisco, Ubiquiti Unifi

Development Tools

(14 years)

Git, Gitlab, GitHub, UML, Linux, Bash, ZSH

Electronics

(9 years)

UHF, VHF, Microwave, Cellular, Firmware, C, Microelectronics