

ANTHONY OLIVER

SOFTWARE ENGINEER / DEVOPS ENGINEER / ENTREPRENEUR

ABOUT

Anthony is a technologist and entrepreneur. Attended Michigan Technological University for software engineering with a concentration in robotics and embedded systems. The co-founder of a venture backed start-up. A core developer of a popular open source computer vision library. He is a published author, patent holder, has mentored international students for Google's Summer of Code. Helped establish a local non-profit and incubate a vibrant and productive hackerspace.

WORK EXPERIENCE

Sight Machine

<https://sightmachine.com>
April 2011 - Present

Co-Founder / Devops (SRE) Engineer / Applications Engineer

Sight Machine is the category leader for manufacturing analytics and used by Global 500 companies to make better, faster decisions about their operations. Sight Machine's analytics platform, purpose-built for discrete and process manufacturing, uses artificial intelligence, machine learning, and advanced analytics to help address critical challenges in quality and productivity throughout the enterprise.

Highlights

- Helped grow a company from just 2 people to over 100
- Wrote software that runs at Fortune 500 companies 24 hours a day
- Multiple years experience running Kubernetes (since v1.5) in AWS, GCP, and Azure in Production with various advanced configurations (affinity, stateful services, cost optimization, on-demand scaling, etc)
- Managed hundreds of servers in production
- Obtained SOC2 compliance
- Ran migrations of customers across various cloud providers (AWS, GCP, Azure), with minimal downtime
- Built in-house tools to streamline development as well as deployment to production
- Fullstack engineered solution for configuring edge devices
- Independently supported legacy vision system customer with custom solution (Python, Flask, Elasticsearch, Plotly) and industrial system integration while company transitioned to manufacturing analytics
- Deployed on-premised industrial systems that securely sent data to the cloud for processing
- Built a realtime vision system inspection system for Chrysler that outperformed 11 of their manufacturing plants

Ripple Science

<https://ripplescience.com/>
November 2018 - December 2019

Consultant / Devops

Ripple Science delivers web-based software and an active registry that facilitates the recruitment and management of research participants for clinical and translational studies. By adapting sales and marketing automation tools to the process of participant recruitment,

CONTACT

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<https://linkedin.com/in/anthonyoliver>
- Github**
<https://github.com/xamox>
- Keybase**
<http://keybase.io/xamox>

EDUCATION

2001 - 2006
Michigan Technological University
Bachelor
Software Engineering
GPA: 3.2 (core)

2000 - 2001
Ferris State University
Bachelor
Software Engineering

SKILLS

Devops / Infrastructure / Cloud Engineering

Kubernetes	Docker	AWS	GCP
Azure	Digital Ocean	Ansible	Chef
Terraform	Elasticsearch	Kibana	
Prometheus	Grafana	Kafka	RabbitMQ
Sentry	Sysdig	Helm	Helmfile
Fluentd	GitOps	Jenkins	StackStorm
CircleCI	TravisCI	Pagerduty	OpsGenie
Packer	Telepresence	Velero	JFrog
Harbor			

Security

SOC 2 Compliance	Beyond corp	Zero Trust	
DevSecOps	OpenVPN	L2TP/IPSEC	Falco
Anchore	Clair	Kube-bench	
Sysdig Secure	kube-hunter	Cert-manager	
Keycloak	OAuth2 Proxy	Vault	
Kubernetes RBAC Policies			

Ripple empowers its customers to recruit more participants faster.

Highlights

- ◀ Helped with planning and migration to kubernetes
- ◀ Started down path for SOC2 compliance
- ◀ Fixed major performance issue with platform where dashboard went from 30-45 seconds to load to under 5 seconds
- ◀ Started instituting security best practices
- ◀ Trained new devops FTE hire

Switchback

📍 <https://switchbackcms.com/>
November 2009 – April 2010

Web Developer

Switchback was a Drupal based web development shop. It's primary focus was integration with Drupal and CiviCRM for businesses.

Highlights

- ◀ Built the Faculty Memoir Project for the University of Michigan
- ◀ Helped develop membership management tool called Caravan
- ◀ Developed web based software and web services for a number of large clients using drupal and civicrm

CEC Controls

📍 <https://www.cecontrols.com/>
January 2008 – March 2009

Vision Application Engineer

Machine Vision Integrator at factories for quality control.

Highlights

- ◀ Designed and programmed various industry standard vision systems for error proofing, traceability, and identification
- ◀ Supported 200+ camera systems for new General Motors Transmission Factory
- ◀ Saved significant licensing and software cost by suggesting and installing various alternative open solutions
- ◀ Built company website that is still running 11 years later

Google

📍 <https://developers.google.com/open-source/gsoc/2007/>
June 2007 – August 2007

Summer of Code Student

An international annual program in which Google awards stipends to students who successfully complete a free and open-source software coding project during the summer.

Highlights

- ◀ Worked on Case Tracker Module for Drupal

Roadsoft

Backend / Platform

MongoDB PostgreSQL MySQL Python
Gevent RESTful Services Flask MVC
PHP

Web Development

HTML Javascript React Drupal

Data Science / Engineer

Jupyter / IPython Notebooks Pandas Scipy
Numpy OpenCV

📖 PUBLICATIONS

Patent: Machine-vision system and method for remote quality inspection of a product

📄 USPTO
28 April 2018
📍 <https://patents.google.com/patent/US9955123B2/>

A machine-vision system for monitoring a quality metric for a product.

Book: Practical Computer Vision with SimpleCV

📄 O'Reilly Media
21 August 2012
📍 <http://shop.oreilly.com/product/0636920024057.do>

Learn how to build your own computer vision (CV) applications quickly and easily with SimpleCV, an open source framework written in Python.

🗣️ LANGUAGES

◀ Python	Master
◀ Java	Intermediate
◀ Javascript	Intermediate
◀ PHP	Intermediate
◀ C / C++	Intermediate
◀ GO	Beginner

♥️ INTERESTS

Mountain Biking

Kickboxing

Guitar

Hiking

Gaming

Snow Boarding

📄 REFERENCES

🔗 <http://roadsoft.org/>
June 2007 – August 2007

Available Upon Request
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Web Developer

Road Asset Management Software for the Michigan Department of Transportation

Highlights

- ◀ Build web tool that allowed customers to upload MDOT data securely vs. having to mail in CDs / harddrives with the data
- ◀ Allowed customers to use the same tool to pull updates vs. having to do traditional method of mailing CDs

VOLUNTEER

Google Summer of Code

🔗 <https://www.google-melange.com/archive/gsoc/2012/orgs/simplecv>
2012 – 2014

Mentor

Mentors are people from the community who volunteer to work with a student. Mentors provide guidance such as pointers to useful documentation, code reviews, etc. In addition to providing students with feedback and pointers, a mentor acts as an ambassador to help student contributors integrate into their project's community.

Highlights

- ◀ Helped students develop their skills and work on an open source project, went on to Facebook/Booking.com

A2Geeks

🔗 <https://www.a2geeks.org>
2010 – 2014

Treasurer & Director

A2Geeks is a 501(c)3 educational non-profit corporation, dedicated to enriching Ann Arbor for creative and innovative people to live, work and play. Founded in 2010 by a dedicated team of volunteers, we are a volunteer operated organization.

Highlights

- ◀ Helped incorporate 501(c)3 non-profit for the benefit of the local community
- ◀ Helped organize and execute local events (makerfaire, ignite talks, etc)