Jeffrey A. Clark

About

Jeffrey A. Clark (Alex) is the Creator of Python Pillow, President of ACLARK.NET, LLC and President & Executive Director of DC Python.

Alex has a Bachelor of Science in Computer Science from Loyola University in Maryland (formerly Loyola College).

He has worked as a Systems Administrator, Network Engineer, Python Programmer and Technical Team Leader since May 1998.

Work Experience

ACLARK.NET, LLC

President and Co-Founder, Python Programmer, Full Stack Web Developer, Platform Engineer

May 2004 - present

- GeoDjango and Wagtail CMS development for Zeitbyte LLC's Zeitcaster Events (September 2017 - present)
    - Develop and maintain location-based library of events for all ages and interests.
    - Project management in GitHub.
    - Developer team management.
- Wagtail CMS development for the Community Foundation of Boone County's Connect Boone County website (May 2022 - present).
    - Maintain legacy site developed by original vendor.
    - Continue deployments to client's AWS account.
    - Monthly AWS Elastic Beanstalk platform upgrades.
- Plone CMS and Wagtail CMS development and hosting for the National Forum of ESRD Networks (February 2011 - present).
    - Develop, deploy and maintain Wagtail CMS.
    - Migrate Plone CMS content to Wagtail CMS.
    - Develop, deploy and maintain Plone CMS.
    - Deploy to Amazon Web Services via Elastic Beanstalk.
- Django Developer for Two Rock Software (June 2022 - June 2023)
- Drupal developer for National Initiative for Cybersecurity Careers and Studies (September 2019 - February 2020)
- GeoDjango developer for National Geographic's Out of Eden Walk website (July 2015 - October 2016).
- Plone CMS development for the Navy International Programs Office.
    - Plone CMS deployments on Windows.
- Plone CMS development for The Nature Conservancy.
- Plone CMS development for Radio Free Asia.
    - Migrate Bricolage CMS content to Plone CMS.
- Plone CMS development for SABES, the Massachusetts adult education (AE) professional development (PD) system.
- Plone CMS development for NASA's NASA Science website.

National Institutes of Health / National Institute of Mental Health / Division of Intramural Research Programs / Neurophysiology Imaging Facility

Systems Administrator

March 2013 - October 2023

- Provide research services to NIH research community.
- Manage and maintain computers, software and related items for scientific core facility.
- Manage and maintain NetApp storage system featuring dual FAS-3240 and FAS-2240 controllers, SnapMirror and 200T data across 8 volumes, shared via NFS & CIFS, authenticated and authorized via NIH Windows domain controller.
- Manage and maintain Dell VMWare server with 11 virtual machines, each with 32G RAM & 8G disk, primarily used by researchers to perform data analyses with MATLAB software.
- Install and configure Ubuntu Linux, CentOS Linux, Apple macOS Unix and Microsoft Windows workstations and servers.
- Produce and maintain professional documentation with Sphinx software containing facility usage instructions and systems documentation.
- Research and purchase computers, software and related items through complex government purchasing system.
- Frequently surplus broken or unused computers and other items to effectively manage severe physical space limitations.
- Frequently update property manager with ownership and location status of accountable property for entry in NIMH property database.
- Provide desktop and mission-critical production operations support.

National Institutes of Health / National Institute of Mental Health / Division of Intramural Research Programs / Scientific and Statistical Computing Core

Systems Administrator

May 2002 - October 2005

- Provided research services to NIH research community.
- Managed and maintained computers, software and related items for scientific core facility.
- Installed and configured Debian Linux, Fedora Core Linux, Redhat Linux, Apple OS X Unix and Microsoft Windows workstations and servers.
- Installed, configured and maintained Apache web server, Plone content management system, ProFTPD FTP server, OpenLDAP directory services, CIFS & NFS file sharing services, CVS version control system, and Arkeia tape backups.
- Researched and recommended computers, software and related items for purchase through complex government purchasing system.
- Analyzed network and computer security.
- Analyzed network performance with MRTG software.
- Provided Plone content management system instruction to content editors.
- Provided desktop and mission-critical production operations support.

Genuity

Network Engineer

October 1998 - November 2001

- Developed Perl and Expect software to support remote configuration of over 2,000 Cisco 2511 Access Servers, Equinox Terminal Servers, and Cisco Catalyst 1900/2820 Ethernet Switches.
- Developed Perl CGI software to support remote configuration of access servers with over 4 ingress T1 data lines via SNMP e.g. Cisco 5400, Lucent APX 8000, Nortel CVX 1800.

- Configured over 2,000 Cisco Access Servers, Equinox Terminal Servers and Cisco Catalyst Ethernet Switches.
- Installed and configured Debian Linux, Redhat Linux, Sun Microsystems Solaris Unix and Microsoft Windows workstations and servers.
- Configured Linux kernel modules to support myriad network interface cards.
- Researched and resolved complex network connectivity issues.
- Verified successful negotiation of TCP, PPP and L2TP protocols through dial-up connections between client programs and remote access servers.
- Performed maintenance on AOLnet and BBN Dialinx dial-up networks.
- Provided mission-critical production operations support.

Charm Net

Systems Administrator

January 1998 - August 1998

- Managed and maintained 4 BSDI Unix servers for over 2,000 internet service provider customers.
- Installed, configured and maintained DNS, NFS, Sendmail, Apache, INND and Dump/Restore software.
- Installed and configured computers and software for streaming FM radio to the internet.
- Installed and configured BSDI Unix servers and Microsoft Windows workstations and servers.
- Provided mission-critical production operations support.

Loyola University Maryland

Help Desk Technician

August 1996 - November 1997

- Installed and configured Sun Microsystems Solaris Unix, Slackware Linux, Redhat Linux and Microsoft Windows workstations and servers.
- Performed installation and maintenance of computers and software in labs, offices, and dormitories.
- Provided technical support to students, faculty, and administrators via telephone and on site.

Skills

Programming Languages

- C
- Python
- JavaScript

Web Development

- Django (Django REST framework, Django Allauth, Django Crispy Forms, Django Debug Toolbar, Django ORM)
- React (Jest, Webpack, Babel, ESLint)

Frontend Technologies

- HTML5, CSS3, JavaScript
- Bootstrap

Backend Technologies

- RESTful API development with Django REST framework
- Database design and management (PostgreSQL, MySQL)

Cloud Services

- Amazon Web Services (AWS)
  - EC2, S3, Lambda, RDS
  - AWS Elastic Beanstalk for deployment
  - AWS CloudFormation for infrastructure as code

Version Control

- Git (GitHub, GitLab, Bitbucket)

Development Tools

- Docker for containerization
- Webpack for bundling and asset management
- npm and pip for package management

Testing

- Unit testing and test-driven development (TDD)
- Pytest for Python testing
- Jest for JavaScript testing

Other Skills

- Continuous Integration and Continuous Deployment (CI/CD) with Jenkins and GitHub Actions
- RESTful API design principles
- Web security best practices
- Responsive and mobile-first web design with Bootstrap

Soft Skills

- Strong problem-solving and debugging skills
- Effective communication and collaboration in a team environment
- Adaptable and quick learner in a fast-paced development environment

Education

Bachelor of Science

Loyola University Maryland (formerly Loyola College in Maryland)

- Major in computer science
- Month and year of graduation: January 1999 (participated in the graduation ceremony in May of 1998)

Additional Work Experience

Python Pillow

Fork Author & Project Leader

July 2010 - Present

- Forked Python Imaging Library to create a frequently-updated and well-maintained alternative to the Python Imaging Library.
- Facilitate growth of core team from single volunteer to many volunteers over many years.
- Oversee development to ensure best possible quality of releases.
- Implement and maintain quarterly release schedule.
- Write and submit grant proposal to fund Python 3 compatible version of Pillow.
  - Sent to Python Software Foundation February 28, 2013.
  - Passed unanimously on March 4, 2013.
- Facilitate funding of 4-person core team by Tidelift.

DC Python

President and Executive Director

2008 - Present

- Co-founded 501(c)(3) non-profit organization to promote & support Python software in DC.
- Oversee events to ensure best possible quality of service to community.
- Envisioned, co-organized and co-hosted Plone Conference 2008 in DC.
  - Largest yearly gathering of Plone developers and community.
  - First US/Eastern location since inaugural event in 2003.

Parkwood Residents Association

Webmaster & Executive Committee Member

2014 - 2020

- Maintain website for PRA to serve residents of Parkwood community in Bethesda, MD, USA.

References

- Available upon request.

Awards

PyCon 2012 Startup Row Winner

Founder of pythonpackages.com

March 2012

- Exhibit pythonpackages.com on Startup Row at PyCon 2012 in Santa Clara, California.
- Pitch "pythonpackages.com began in October 2011 as a fun way to provide useful information to the Python community. Since then hundreds of folks have visited the site to feature their favorite Python packages, for a total of over 10K packages featured. New

features have come regularly, and some new features are waiting in the wings, about to be launched."

Publications

Plone 3.3 Site Administration

PACKT Publishing Limited Author

July 2010

- Author of practical book on new and emerging technology.

Contact

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