

# Andrew Hoetker

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## Education

- **Arizona State University** **Tempe, AZ**  
*Ira A. Fulton Schools of Engineering, BSE Chemical Engineering* *August 2014 – May 2020 (Expected)*
    - Completed coursework includes Chemical Reactor Design, Modern Separations, Numerical Methods, Heat and Mass Transfer, Process Dynamics and Systems Control, Process Design.
    - Remaining coursework includes Six Sigma, Capstone Design Project, Analytical Chemistry.
  - **SACHE Process Safety Certificate Program** **Tempe, AZ**  
*Safety and Chemical Engineering Education Professional Development Coursework* *April 2019*
    - Level I Certification, including Hazard Recognition & Introduction to Managing Process Safety Hazards.
    - Level II Certification, including Toxicological, Chemical Reactivity, Fire, & Explosion Hazards.
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## Experience

- **ASU Bioinformatics Research Team** **Tempe, AZ**  
*Lead Python Developer* *2017 – 2019*
    - Web and command-line interface (Flask)
    - Python-R integration (Rpy2)
    - SQL Database and task queue
    - Unit and integration testing
    - Deployment (Docker, PyPI)
  - **Arizona State University, Ira A. Fulton Schools of Engineering** **Tempe, AZ**  
*Undergraduate Teaching Assistant* *2019 – 2019*
    - Teaching Assistant for CHE 334 - Introduction to Transport Phenomena II: Heat and Mass Transfer
    - Hosted office hours and reviews
    - Primary topics were 3-dimensional reasoning, numerical methods, computational modeling
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## Projects

- **Autoreport** **GitHub Repository**  
*Report generation using  $\LaTeX$  embedded in MATLAB source files.* *2018 – Present*
    - Extends the built-in *publish* functionality in MATLAB.
    - Implements custom preamble for use of arbitrary packages and styles.
    - Distributed as an Add-On through MathWorks Community Apps.
  - **Legacy** **GitHub Repository**  
*Interactive Data Visualization of Television Ratings in Python* *2018 – Present*
    - Built-in support for the *Open Movie Database* API.
    - Support for custom source URLs with web-scraping module.
    - Flask web application with Jinja2 dynamic templating, BokehJS interactive plots.
    - Distributed as a Docker image for integration with PostgreSQL/mariadb server.
  - **Home Server** **Project page**  
*Proxmox Hypervisor and Docker Host* *2017 – Present*
    - Virtualization using KVM, LXC containers, and Docker.
    - Self-hosted Git and Continuous Integration using GitLab.
    - Secure public-facing webserver using Nginx and LetsEncrypt.
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## Technical Skills

**Languages:** Python, Rust, JavaScript, C, C++, Java, MATLAB,  $\LaTeX$ , Shell script

**Tools:** Git, SSH, PostgreSQL, SQLite, MongoDB, Linux, Docker, Ansible, QEMU/KVM, ChemCAD, Aspen