

# Gentry Smith

915 E Warner Ave Guthrie, OK 73044

☎ 913-231-3282 | ✉ iamgentrysmith@gmail.com | in iamgentrysmith

## Summary

- Over three years graduate experience in data analysis, tool automation, and computational methods.
- Over seven years experience in various programming languages and the Linux environment.
- Passionate about solving problems with automation and developing new tools to improve user workflow.

## Technical Skills

- Python 2, Python 3, Java, R
- Bash, Git, VIM
- Microsoft Office, Apple iWork, Google Drive
- macOS, Windows, Linux, FreeBSD
- Agile, Test-Driven Development

## Education

### Oklahoma State University

M.S. IN CHEMISTRY

Stillwater, OK

Dec. 2018

- Focus: Computational Methods.
- Research emphasis on structural conformation prediction and optimization in tetravalent systems.

### Southern Nazarene University

B.S. IN CHEMISTRY

Bethany, OK

May 2016

- Minor in biology.
- Course emphases in physics and computer science.

## Technical Experience

### Self-Employed

AUTOMATION CONSULTANT

Oklahoma City, OK

Jan. 2019 - Present

- Independent contractor providing custom automation solutions for repetitive and time-intensive workflow tasks.
- Involved creation and maintenance of software tools that interface with multiple programs to unify the user experience.
- Recent contract involved improving company workflow by 10% through automation tools.

### Self-Employed

COMPUTER SYSTEMS CONTRACTOR

Oklahoma City, OK

June 2013 - Present

- As-needed computer specialist providing on-site tech support and customized hardware solutions.
- Prioritized hardware purchases to provide a cost-effective solution and excellent end-user experience.

### Nazarene Publishing House

CREATIVE INTERN

Lenexa, KS

Summers 2012-2014

- Assisted with various Adobe Creative Suite projects
- Explored public relations applications of 3D printers at conferences.
- Assisted with raw footage ingest into archive.

### Southern Nazarene University

TECHNOLOGY INTERN

Bethany, OK

Jan. - Dec. 2013

- Directly worked with the Vice President of Information Technology.
- Assisted in preparation of smart devices for Board of Trustees meetings.
- Led investigations into possible technologies of interest to the university staff and students.

## Research Experience

### Oklahoma State University

MASTER'S GRADUATE RESEARCH

Stillwater, OK

Aug. 2016 - Dec. 2018

- Investigated conformation sampling of tetravalent molecules and ice water structures
- Simplified ice water structure generation
- Created highly parallelized programs to guide a semi-random walk to optimize molecule structure.
- Concluded in verbal defense and Master's Thesis

## Southern Nazarene University

### UNDERGRADUATE INDEPENDENT RESEARCH

- Led investigation into adsorption properties of graphene on alkenes and alkynes.
- Synthesized and tested properties of graphene with magnetite.
- Designed and built a workstation for basic computational research for the department.

*Bethany, OK*  
*Aug. 2015 - May 2016*

## Southern Nazarene University

### FIELD BIOLOGY SEMESTER ABROAD

- Identified and measured hundreds of trees in a primary growth plot.
- Plotted measurements with collaborative data to measure the effects of climate change on the region.
- Presented findings in Spanish to local community

*San Gerardo de Dota,  
Costa Rica*  
*Jan. - May 2014*

## Academic Experience

---

### Oklahoma State University

#### GRADUATE TEACHING ASSISTANT

- Assisted in teaching and grading responsibilities for general chemistry courses.
- Strengthened leadership and mediation skills as an intermediary between students and head professor.
- Average 4.65 / 5.00 rating on instructor evaluations.

*Stillwater, OK*  
*Aug. 2016 - May 2019*

### Southern Nazarene University

#### LAB ASSISTANT

- Assisted in instruction of introductory chemistry lab experiments.
- Led multiple lab experiments while the primary instructor was not present.

*Bethany, OK*  
*Aug. 2014 - May 2016*

## Honors & Awards

---

- 2018 **Recipient**, Colonel Whiteley Award, OSU  
2017 **Recipient**, Skinner Fellowship, OSU  
2016 **Recipient**, Skinner Fellowship, OSU  
2016 **Recipient**, Outstanding Senior in Chemistry, SNU

*Stillwater, OK*  
*Stillwater, OK*  
*Stillwater, OK*  
*Bethany, OK*

## Presentations

---

### Master's Thesis Defense

THESIS DEFENSE: "EXPLORING CRITICAL CONFORMATIONS: STATE SEARCHING AND SAMPLING IN BOTH GERMANIUM CHAINS AND ICE INTERFACES"

*Stillwater, OK*

*Nov. 2018*

### Oklahoma State University Cadre Conference

POSTER PRESENTER: "OPTIMIZING MOLECULAR GEOMETRIES USING PARALLEL ENERGY MAPPING"

*Stillwater, OK*

*Nov. 2017*

### American Chemical Society Pentasectional Meeting

POSTER PRESENTER: "OPTIMIZING MOLECULAR GEOMETRIES USING PARALLEL ENERGY MAPPING"

*Lawton, OK*

*Mar. 2017*

### Research Evening at the Quetzal Education Research Center

PRESENTER: "ESTABLISHING A BASELINE PLOT IN THE NEOTROPICAL CLOUD FOREST OF COSTA RICA'S LOS SANTOS FOREST RESERVE" {IN SPANISH}

*San Gerardo de Dota,  
Costa Rica*

*Apr. 2014*

### SNU Science Seminar

PRESENTER: "WHAT'S A 3D PRINTER? A BRIEF INTRODUCTION TO 3D PRINTING"

*Bethany, OK*  
*Oct. 2013*

### SNU Undergraduate Research Symposium

PRESENTER: "PRIVATELY PUBLIC: USER PRIVACY IN SOCIAL MEDIA"

*Bethany, OK*  
*Apr. 2013*