

# Nate Randa

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**Structural/transportation engineer and writer with experience in wood/steel/LGS/concrete design, traffic management design, software engineering, and proposal/report writing. I am not actively seeking new employment.**

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## EDUCATION

### Worcester Polytechnic Institute

B.S. Civil Engineering and B.S. Professional Writing, **3.97/4.0 GPA**

Relevant Coursework: CE 3010 Structural Engineering, CE 3050 Traffic Engineering, CE 3044 Foundation Engineering, WR 3112 Rhetorical Theory.

Worcester, MA

Class of 2026

## EXPERIENCE

### Cornerstone Energy Services, Inc.

Civil Engineering Intern

Worcester, MA

May 2024 - Dec 2025

- Designed foundations, anchors, supports, trenches, and steel structures with *AutoCAD*, *RISA*, *Tekla Tedds*, and *STAAD.Pro*
- Designed and analyzed a steel PEMB expansion using *STAAD.Pro*, *AutoCAD*, and *Python*, compliant with IBC 2018, ASCE 7-16, and AISC 360-16 codes
- Designed traffic management plans and performed utility research
- Developed internal structural design tools in *Python* and *Excel*

### WPI Writing Center

Writing Tutor

Worcester, MA

Aug 2024 - Present

- Aiding students with research, composition, syntax, style, grammar, and communication

### Plan-B Architects

Architecture Intern

Sherborn, MA

Jun 2021 - Aug 2021

- Planned interior equipment layouts for international healthcare and biotechnology clients
- Spearheaded elevation and overhead drawings in *AutoCAD* and *Excel*

## SKILLS

### Engineering & Computer Science

- AutoCAD, Bluebeam Revu, RISAFloor, RISA3D, RISAFoundation, Tekla Tedds, RAM SS, STAAD.Pro
- Wood, concrete, steel, foundation, and traffic management design
- Python and Golang; LaTeX and Typst typesetting; Linux, networking, and IT

### Writing & Production

- Technical documents & proposals; scholarly research & synthesis
- Adobe Photoshop/Premiere/AE/Illustrator, Affinity, Microsoft Office, Google Suite

## PROJECTS

### Major Qualifying Project: “Design of Mixed-Use Buildings with Podium Construction”

In Progress

Designing and analyzing a timber, concrete, and steel mid-rise podium building featuring apartments and retail. Performing cost-benefit analysis on alternative design and material choices. Ensuring code compliance with IBC, ASCE, AISC, ACI, and AWC

### Major Qualifying Project: “Solarpunk: Dreaming a Sustainable Future”

In Progress

Co-writing a journal article exploring the rhetorical effectiveness of solutions-forward climate fiction through contemporary ‘solarpunk’ novels

### Interactive Qualifying Project: “International Tour Groups at the British Museum”

March 2025

Human subjects research that gathered, visualized, and synthesized group behavioral data

### Humanities and Arts Inquiry Seminar: “Incelese: The Creation, Proliferation, and Normalization of the Incel Language”

February 2024

Synthesized scholarly literature and reported novel rhetorical analysis of online ‘incel’ slang