

# Matt Nice

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## EDUCATION

### Vanderbilt University

M.Eng. Cyber Physical Systems, GPA: 3.9

Nashville, TN

Spring '19 – Fall '19

### Tulane University

B.S.E. Biomedical Engineering with Honors

New Orleans, LA

Fall '14 – Spring '18

- Honors Thesis, Induction of Angiogenesis in the Mouse Mesentery.

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## EXPERIENCE

### M. Eng Research Project, Institute for Software Integrated Systems, May '19 - August '19

- Reverse engineered the CAN bus and on-board radar unit of a vehicle with in-depth Python data analysis
- Order of magnitude reduction of experimental costs, with an upgrade in experimental information collected

### Inventor Contestant, Make48, August '18

- Successful plan, MVP prototype and pitch of a new product idea in 48 hour invent-a-thon competition.

### Patent Prosecution Intern, Pearl Cohen Zedek Latzer Baratz, May '18 - August '18

- Learned how designs go from engineer to accepted patent. Notable clients: Medtronic, 3D Systems, Volkswagen.

### Research Assistant, Microvascular Dynamics Lab, June '15 - May '18

- Worked on multiple projects including authorship of conference abstracts and published papers in *Microcirculation* (<https://doi.org/10.1111/micc.12502>).

### Rapid Prototyping Tech, Tulane Makerspace/ Vanderbilt Wond'ry, January '18- August '19

- Assisted students and faculty in the drafting and fabrication of desired parts and projects.
- Operated and maintained 3D printers, laser cutters, metal and wood shop machinery. Taught basic CAD.
- Upheld all field safety standards and regulations (e.g. PPE).

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## ASSORTED PROJECTS

- Data analysis for Compete America Coalition used in immigration reform talks with National Economic Council
- Public school growth projections using U.S. Census and archived Arlington County enrollment datasets
- Modeled and verified automated cruise control using NuXMV symbolic model checker

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## LEADERSHIP AND SERVICE

**Tulane Ultimate Frisbee Club:** '16-'18 Club Vice President, '14-'15 captain of Rex "B" team.

**Community Volunteer:** Washed laundry for people suffering homelessness in Nashville. Assisted high school students with science projects in New Orleans. Repeated Ronald McDonald House visitor/chef. Attended various New Orleans STEM outreach events.

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## SKILLS

**Computer and Natural Languages:** *Proficient:* Python (pandas, numpy), French, MATLAB, Excel, InkScape.

*Academic Experience:* Java, HTML/CSS, Ruby on Rails, LaTeX, SQL, AutoCad, Fusion 360, C/C++.

**Biological Lab:** Cadaver dissection, IHC Tagging, Fluorescent Microscopy, Tissue Culture, Mesentery Harvest.

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## HONORS AND AWARDS

Senior Honors Scholar (1 of 25 per class)	2018
Tulane University Scholar (1 of ~80 per class)	2015-2018
Tulane University Honors Program	2015-2018
Distinguished Scholar Merit Scholarship (\$25,000 annually)	2015-2018
Dean's Grant	2015, 2016
Tulane Honors Summer Research Grant	2015