

# Peter (Rocky) Villano

<https://saej.in>

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Relocating to California

Seeking an Associate Software Engineer position at Sony Pictures Imageworks to apply technical skills from both academic and business environments. Leveraging strong Python skills and extensive knowledge of human perception, procedural 3D modeling, and user-centric interface design.

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## PROFESSIONAL EXPERIENCE

### **Center for Research Computing, University of Notre Dame**

*Assistant Research Programmer - Wellbeing at Work*

July 2019 - April 2021

- Created dynamic visualizations for cross-platform, React Native App to administer daily mood surveys for multi-year research project
- Designed, implemented, and documented RESTful APIs using Postman, Python, Django REST, and OAuth Deployed web server using Docker-Compose, Nginx, and Bash Scripts to power the app
- Developed JSON Schema validation in front of Postgres database to allow for more complex data handling
- Empowered project client to resolve issues independently with expressive administrative tools seamlessly integrated into the Django admin site
- Created and hosted a series of lightning talks to facilitate inter-departmental knowledge transfer

### **Computer Graphics and Visualization Lab, Purdue University**

*Honors Research Project (for credit)*

Jan 2019 - May 2019

- Created automatic statistics generator with significant results display in Python and Excel
- Consulted on ergonomics for an augmented reality user interface
- Contributed to an Android app, using camera and networking APIs in Java

### **Center for Research Computing, University of Notre Dame**

*Undergraduate Research Assistant (Summer)*

May 2017 - Aug 2018

- Examined Tensorflow for suitability in satellite image classification in Python
- Developed Android app used for machine learning data acquisition in Java
- Implemented an image upload server backend API using PHP and SQL
- Programmatically generated insightful visualizations in Python

### **Engineering and Science Computing, University of Notre Dame**

*Computer Consultant (Summer)*

June 2013 - Aug 2016

- Collaborated with students, professors, and staff to solve IT problems
- Presented cost analysis of adopting virtual desktop infrastructure

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## LEADERSHIP EXPERIENCE

### **BoilerMake Hackathon**, West Lafayette IN

*Event Planner, Social Media Manager*

Jan 2016 - Dec 2019

- Increased advertising at participating universities resulting in largest applicant pool (1600 students) to Purdue's premier hackathon

### **Boy Scouts of America**, Troop 572, Granger IN

*Eagle Scout*

June 2008 - June 2015

- Planned, budgeted and completed Eagle Project by leading 20 person team of volunteers in the construction of three concrete telescope platforms at Potawatomi Wildlife Park, Bourbon, Indiana
- Held several leadership positions in the troop including Assistant Senior Patrol Leader, Patrol Leader and Bugler

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## EDUCATION

### **Purdue University**, West Lafayette, IN

*B.S. in Computer Science Honors; Minors in Mathematics & Psychology*

May 2019

- Overall GPA: 3.2; Major GPA: 3.7
- Highlighted coursework
  - Intro to Computer Animation: Programmed a 3D engine and programmatic animation. Final project: color-blind accessibility software utility using C++ and Windows APIs
  - Industrial and Organizational Psychology - topics included management, leadership, inclusivity, training and positive work environments

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## TECHNICAL SKILLS

**Proficiencies:** Bash, Blender, C, C++, C#, Django, Docker, GIMP, NGINX, Java, JavaScript, Linux, macOS, Podman, Postgres, Python, React, React Native, SQL, Unix, Windows

**Misc. Skills:** 3D Printing, Safe Cracking, Wilderness Survival, Poetry