Dawid Bycul

Undergraduate Student - Computer Engineering - University of Illinois at Urbana-Champaign

@ dawid@bycul.net 📞 (773) 742-7262 📍 Lisle, Illinois 🔗 LinkedIn 🔗 bycul.net

Education

Computer Engineering, BS
University of Illinois at Urbana-Champaign

📅 Aug 2019 – Dec 2022 📍 Urbana-Champaign, Illinois 🎓 GPA: 3.79

High School Diploma
Downers Grove North High School

📅 Aug 2015 – May 2019 📍 Downers Grove, Illinois 🎓 GPA: 4.6

Professional Experience

FPGA Design Engineering Intern
Shure

📅 May 2022 - Present 📍 Niles, Illinois

- Performing system level and FPGA specific tests on microphones, wireless mics, signal processors, and personal monitors
- Using the cocotb Python library to create more maintainable and comprehensive tests while reducing the overhead of the verification process

Digital ASIC Design Verification Intern
Argonne National Laboratory

📅 February 2021 - Present 📍 Online

- Developing a digital ASIC verification environment for a cutting edge X-Ray detector. Creating and executing a detailed test plan using SystemVerilog
- Automating previous test plans for on-going regression testing throughout the design cycle

Lead Course Aide for Freshman Electronics Project Lab
University of Illinois at Urbana-Champaign

📅 January 2020 – January 2022 📍 Urbana-Champaign, Illinois

- Led Freshman in research and project creation for their area of interest, facilitating and inspiring communication and collaboration
- Maintained communication with course professors regarding various groups' progress, with approximately 40 groups per semester

Autonomy & Mission Solution SEPP Intern
Collins Aerospace

📅 June 2021 - July 2021 📍 Cedar Rapids, Iowa

- Synthesized the needs of stakeholders and utilized Python, Bash, and PowerShell to create a Chaos testing environment aimed at eliminating software fragility in system of systems Manned-Unmanned vehicle simulations, with maintainability, versatility, and extendibility as a focus.

Skills

Programming Languages

C, C++, SystemVerilog, x86, Python, LaTeX

Environments

- Linux and Windows
- Git
- Autodesk Inventor
- Google and Microsoft Office Suites
- Adobe Suite

Technical Skills

- Digital Verification and Testing
- Systems Engineering
- Optimizing Compute Performance
- Chaos Engineering

Communication

- Fluent in Polish, English, and experience with French
- Expertise in communicating in a high stress performance environment
- Expertise in project planning and giving concise technical project presentations

Achievements

- Co-treasurer and League of Legends coach for Illini Esports. Coached a team to the top sixteen teams nationally. Managed up to 20 people across both roles.
- Accredited diploma for completing Polish school (Polska Szkola w Lombard in Addison, Illinois)

Publications

- S. Strempfer, K. Yoshii, M. Hammer, **D. Bycul** and A. Miceli, "Designing a Streaming Data Coalescing Architecture for Scientific Detector ASICs with Variable Data Velocity," 2021 3rd Annual Workshop on Extreme-scale Experiment-in-the-Loop Computing (XLOOP), 2021, pp. 8-14, doi: 10.1109/XLOOP54565.2021.00007.