

Brian Rieder

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EDUCATION

PURDUE UNIVERSITY

BS IN COMPUTER ENGINEERING
West Lafayette, Indiana
Expected Graduation: May 2017
College of Engineering
Dean's List (All Semesters)
Cum. GPA: 3.65 / 4.0

PENN HIGH SCHOOL

Grad. May 2012 | Mishawaka, Indiana

LINKS

Github:// [brian-rieder](#)
LinkedIn:// [Brian Rieder](#)

COURSEWORK

UNDERGRADUATE

Data Structures and Algorithms
Functional Programming
Object Oriented Programming
Unix Tools and Scripting
Microprocessor Interfacing

Research Assistant

Cloud-based Programming Interfaces

Teaching Assistant

Advanced C Programming

SKILLS

PROGRAMMING

Over 5000 lines:

C • Shell • JavaScript • PHP

Over 1000 lines:

MSSQL • Python • HTML/CSS •

Assembly

Familiar:

Ruby • Matlab • Android • \LaTeX

Introductory Knowledge:

Ada • Java • Visual Basic • Haskell • Scala

ACTIVITIES

- Eagle Scout in the Boy Scouts of America
- Eta Kappa Nu (HKN) ECE Honor Society
- Five Session Co-op in the Professional Practice Organization
- Member of the Electrical and Computer Engineering Student Society

INDUSTRY EXPERIENCE

GENERAL ELECTRIC AVIATION | INFRA-ENGINEERING CO-OP/INTERN

August 2013 - August 2016 (Rotational) | Grand Rapids, MI

ADVANCED COMMON MODELING ENVIRONMENT (ACME) WEB DEVELOPER

- Created a web based interface for users to interact with an Enterprise Architect driven database.
- Increased autonomy of data entry processes and diagram creation for customer presentation through user of **jQueryUI** and **yFiles** libraries in **Javascript**.
- Back-end server and database interfacing with **PHP** and **MSSQL** to retrieve, update, and delete entries from tables with minimal user interaction.

PLATFORM ARCHITECTURE STUDY LEAD SUB-SECTION ENGINEER

- Lead modeling design engineer on the Platform Architecture Study Internal Research and Development (IRAD) team working to create a model to migrate future era business jets from a federated platform to a General Electric designed **Integrated Modular Architecture (IMA)**.
- Led model contribution for assigned subsections of the general purpose business jet model to be delivered to **Dassault Systèmes** and **Gulfstream Aerospace**.
- Oversaw the creation and analysis of ATA 100 defined subsystems 26, 28, and 38: **Fire Protection, Fuel System, and Water and Waste**.
- Performed functional decomposition, electrical hardware analysis, and software partitioning for input/output allocation to the underlying IMA.

P-8 POSEIDON FLIGHT MANAGEMENT SYSTEMS ENGINEER

- Contributed to the design of the P-8A, P-8I, and P-8AAS flight management systems.
- Acted as a fully functional **Systems Engineer** and performed **Verification and Validation Testing**.
- Utilized **Ada** programming application to **embedded systems** and scripted AutoTest execution with **Visual Basic**.

ACADEMIA EXPERIENCE

WEB PROGRAMMING INTERFACE | LEAD BACK-END DEVELOPER

August 2014 - December 2014 | West Lafayette, IN

Under **Dr. Yung-Hsiang Lu**, worked as a team member to design a web programming interface, **SOPAD**, for the Advanced C Programming course in the Computer Engineering department. Led the development of the back-end interface created primarily in **Python** and implemented several ground-up, independent design techniques (e.g., **Sketch-to-Code**).

ADVANCED C PROGRAMMING TEACHING STAFF |

UNDERGRADUATE TEACHING ASSISTANT

May 2014 - December 2014 | West Lafayette, IN

Led the development of a reconstructed back-end for the class through utilization of a university server to instantaneously pull from a submission repository, grade and assignment, and email feedback to a student using Bash. Assisted **Dr. Alexander Quinn** and **Dr. Yung-Hsiang Lu** in course administration and oversaw grading as well as lab hours.