Jay Valdillez

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Education

Northwestern University, Evanston, IL
McCormick School of Engineering and Applied Science, Bachelor of Science   Anticipated June 2018
Major: **Computer Science**
Segal Design Certificate Program
Donald Richard Gieseker Endowed Scholarship

Relevant Skills

Languages: C, C++, C#, Python, Matlab, assembly, JavaScript, HTML/CSS, SQL, Visual Basic, Lisp
Other Applications: SolidWorks, LaTeX, Cascade, Photoshop, Microsoft Office, WebGL, Apache Hive/Drill

Work Experience

Optum – UnitedHealth Group, *Data Engineering Intern*   Schaumburg, IL; June 2017 – August 2017
- Spearheaded the Apache Drill Pilot program for big data analytics and data extraction against various databases including Hbase, HDFS, MAPRfs, and relational database management systems
- Developed and tested over 90 SQL queries for use with Apache Drill while documenting resource metrics
- Assessed and implemented effective query plan optimizations by finding efficient methods for data extraction

Norris Student Center, *Box Office Supervisor*   Evanston, IL; October 2014 – Present
- Correspond with student groups and university departments to launch events through online portal, manage ticket sales and advertising, and provide technical customer service
- Analyze invoices and previous sales to determine new fee standard regarding credit card sales
- Supervise and train student employees on box office procedures and daily updates

Lockheed Martin, *Software Engineering Intern*   Littleton, CO; January 2014 – May 2014
- Created information conversion tool to parse data into an understandable form using Excel macros and Visual Basic, leading to the first working model. Previous interns had been unsuccessful
- Collaborated with two other interns to develop tool and collectively improve programming proficiencies

Project Experience

Malloc Lab Project – *Computer Systems, Northwestern University*   December 2015
- Collaborated with class partner to create a dynamic storage allocation for C programs on a UNIX system
- Developed an Explicit Free List implementation that accurately and efficiently met the lab requirements

Minz – *Design, Thinking, and Communication, Northwestern University*   Spring 2015
- Redesigned a common kitchen utensil from conception to prototype presentation with a five-student team
- Researched competitor products, surveyed target customers, sketched technical drawings, and developed physical prototypes over a 10-week period culminating with a presentation to a potential investor to highlight and demonstrate key features of our product
- Lead responsibilities for completing technical drawings and developing the prototype design

Mascot Fighter – *Emerging Elite Talent, LLC*   Summer 2013
- Designed concept of iOS app involving competing college mascots through sketching and storyboarding
- Launched research of Objective-C through XCode to demonstrate basic iOS programs

Leadership and Activities

New Student and Family Programs, *Engineering Peer Adviser*   2015, 2016, 2017 - Present
- Mentor and advise group of 10-12 new engineering students on classes, campus life/involvement, and general transition throughout first year
- Facilitate group dialogues and on presentations dealing with serious essential topics including mental health, physical health, and diversity/inclusion

Northwestern Club Ultimate Frisbee Team, *Elected Captain*   September 2014 – Present
- As one of three Team Captains, collaborate with coaches and other players to plan game/tournament strategy, provide instruction on technique/skill, and write player performance evaluations
- Organize and lead practices to prepare for approximately eight competitive tournaments each year