

About Me

I am a computer science student studying at the University of California, Irvine, specializing in the fields of information and algorithms. I have worked with many programming languages in the past, most notably Python and Java. I also have experience in web development and database design. I have held positions in various organizations, including Circle K International and the UCI Office of Information Technology. I have also been a research assistant for Dr. Walt Scacchi in an IoT-based augmented reality project for smart workers in advanced manufacturing. My career aspiration is to become a software developer of applications that would help improve the lives of everyday people. I am interested in the areas of software engineering, human-computer interaction, and data informatics.

My star sign is [Aries](#) and my Myers-Briggs personality type is [ISFJ](#).

Education

University of California, Irvine

Bachelor of Science (BS) In Computer Science
Undergraduate, Class of 2017, 3.992 GPA

Honors

- Chancellor's Award of Distinction
- Dean's Honors List (12X)
- Honors in ICS
- Summa Cum Laude
- UROP Fellowship Award

Nominations

- Assembled Invitee
- Golden Key International Honor Society Nominee
- Honor Society Membership Nominee
- National Society of Collegiate Scholars Nominee
- National Society of Leadership and Success Selectee
- Phi Beta Kappa Nominee

Clubs/Organizations

ICS Honors Program

The ICS Honors Program (ICSHP) provides an opportunity for students in any of the Bren School's majors to carry out a research project under the direction of a Bren School faculty member.

Circle K International

Circle K International (CKI) is an international collegiate service organization that is a sponsored leadership program of Kiwanis International. It promotes service, leadership, and fellowship.

Video Game Development Club

The Video Game Development Club (VGDC) gives students the opportunity to break into the industry by challenging what is expected of college developers.

Test Scores

GRE Verbal Reasoning	GRE Quantitative Reasoning	GRE Analytical Writing
162	164	5.0

Coursework

See the [UCI General Catalogue](#) for detailed course information.

Programming

- Introduction to Programming (ICS 31)
- Programming with Software Libraries (ICS 32)
- Intermediate Programming (ICS 33)
- Programming in C/C++ (ICS 45C)
- Programming in Java (ICS 45J)

Computational Mathematics

- Boolean Algebra and Logic (ICS 6B)
- Discrete Mathematics for Computer Science (ICS 6D)
- Computational Linear Algebra (ICS 6N)
- Introduction to Probability and Statistics for Computer Science (STATS 67)
- Applications of Probability in Computer Science (CS 177)

Computer Architecture

- Introductory Computer Organization (ICS 51)
- Principles in System Design (ICS 53)
- Principles in System Design Library (ICS 53L)
- Principles of Operating Systems (CS 143A)

Information

- Information Retrieval (CS 121)
- Introduction to Data Management (CS 122A)
- Project in Databases and Web Applications (CS 122B)
- Machine Learning and Data-Mining (CS 178)
- Information Visualization (IN4MATX 143)

Algorithms

- Data Structure Implementation and Analysis (ICS 46)
- Design and Analysis of Algorithms (CS 161)
- Formal Languages and Automata (CS 162)
- Graph Algorithms (CS 163)
- Introduction to Optimization (CS 169)
- Introduction to Artificial Intelligence (CS 171)

Other

- Computer Games and Society (ICS 60)
- Introduction to Software Engineering (IN4MATX 43)
- Human Computer Interaction (IN4MATX 131)
- New Media and Digital Technologies (FMS 85C)

Experience

Data Warehouse Developer Intern

UCI Office of Information Technology (April 2015 – August 2017)

Develop and assist fellow OIT staff and the Data Warehouse team in developing and maintaining various database systems at UCI, with extensive use of Microsoft SQL Server and Informatica Designer.

- Compared and wrote reports for hundreds of tables during the company's database migration away from Talend.
- Developed dozens of Informatica ETL mappings and sessions as part of the legacy ODS conversion.
- Updated the Data Warehouse website with new content, including resolving security issues caused by SQL injection.

Technology Chair

Circle K International (April 2015 - March 2016)

Create and consistently update the UCI Circle K website and provide tech support for the board and members trying to access the website's features.

- Managed content and resources for members including general information, weekly updates, calendar events, and media.
- Developed new features and tools for the website such as a personal events portal and a smart announcements system.
- Managed a group of 4 students in organizing the club's first Technology Internship Program.

Lab Tutor

Donald Bren School of ICS (September 2014 - March 2015)

Aid and assist students in designing and developing laboratory programs for introductory computing courses.

- Tutored over 50 students in various ICS courses including ICS 32 (Programming With Software Libraries) and ICS 33 (Intermediate Programming).
- Proctored and facilitated in-lab examinations.
- Wrote [pedagogical materials](#) as resources for future students.

Research

Just-In-Time AR-Based Learning in the Advanced Manufacturing Context

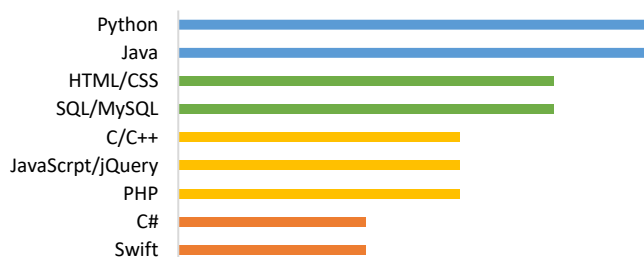
UCI Institute for Software Research (April 2016 – August 2017) [Video](#)

Faculty Mentor: [Dr. Walt Scacchi](#)

Abstract: The use of augmented reality (AR) applications has the potential to greatly reduce errors and increase productivity in the manufacturing space. The application I developed, in particular, focuses on the problem of how to provide effective training, which refers to issues that are related to when workers are required to learn new or updated skills, using AR. In a technique called just-in-time augmented learning, these "smart" workers can use AR to access valuable training resources, which play an important role in informing them of their tasks and responsibilities. This can be done without the need to refer to a secondary laptop computer or tablet, because the resources are loaded directly onto the workers' AR device, integrating the training process into the workflow and reducing diversion. By using various game-based systems and marker-based AR libraries, I designed and developed a prototype for a head-mounted AR application that demonstrates the feasibility of just-in-time augmented learning for use in the assembly line manufacturing context.

Awards: UROP Fellowship Award

Skills



Other Skills

- Critical Writing
- Database Design
- Mobile Application Development
- Social Media/Networking
- Web Technologies

"Bryce's innovative mindset and enthusiastic attitude make him one of the most high-reaching and high-achieving individuals I have ever had the pleasure of knowing."

-Cristian Palomo, Circle K International

"On a personal level, he's a team player who's very easy to work with and dependable, both of which are qualities that are important in any successful career."

-Austin Cho, UCI Office of Information Technology

"Those who have witnessed his efforts and system demonstrations provide high-level praise and acknowledge the significance of his accomplishments, especially as an undergraduate CS student at UCI."

-Walt Scacchi, UCI Institute for Software Research

Industry Technologies: Amazon Web Services, Apache Tomcat, Bootstrap, Eclipse, Git, Informatica PowerCenter, MEAN Stack, Microsoft Office, Microsoft SQL Server, Oracle SQL Developer, Unity, Xcode

Projects

Dazed and Confused (Programmer)

Video Game Development Club (September 2016 - March 2017) [Link](#)

Dazed and Confused is a 2D local multiplayer top-down shooter with the objective to defeat opponents by stunning them with your gun and finishing them in melee.

Skills: C#, Unity, Git

Ocean Waves (Designer, Programmer, Writer)

Global Game Jam (January 2017) [Link](#)

Ocean Waves is a game about a young girl named Ocean who strives to make the world a happier place by waving at the depressed denizens of her nearby park.

Skills: C#, Unity, Git

Bubble Buddy (Lead Designer, Programmer)

Autism App Jam (April 2016) [Link](#) | [Video](#)

Bubble Buddy is a web-based virtual communication companion designed for young children with autism who struggle with communication, identifying emotions, and learning by interacting with them using typical everyday conversation.

Skills: HTML, CSS, JavaScript, jQuery, MEAN Stack, Bootstrap, Git

Awards: Winner (2nd Place), Hype Award

FabFlix (Programmer)

Project in Databases and Web Applications (January 2016 - March 2016) [Link](#)

Fabflix is a web-based interface that allows customers to browse/search for movie information, add interesting movies to their shopping cart, and check out.

Skills: Java, HTML, CSS, MySQL, JavaScript, jQuery, Amazon Web Services, Apache Tomcat, Bootstrap, Eclipse

UC Irvine Circle K Website (Technology Chair, Content Manager, Programmer)

Circle K International (April 2015 - March 2016) [Link](#) | [Video](#)

The UC Irvine Circle K Website utilizes key web development techniques and open-source software solutions to create a reliable and robust website as a resource hub for members and a means of organizing club secretarial information.

Skills: HTML, CSS, MySQL, JavaScript, jQuery, PHP, Bootstrap

Awards: Outstanding Club Website (1st Place)

MedLight (Programmer, UI Designer)

Med AppJam (November 2014) [Link](#) | [Video](#)

MedLight is a mobile application that uses a newsfeed-style of updating system in order to streamline information and communication between healthcare providers and their patients to keep all relevant personnel updated on the patient's health.

Skills: Swift, Xcode, Git

Othello (Programmer)

Intermediate Programming (March 2014)

Othello is a simple version of the popular board game of the same name with a working graphical user interface.

Skills: Python

Volunteering

Circle K International

The primary source of my community service experience comes from my involvement in Circle K International as an event chair for various projects and fundraisers as well as an appointed board member, family head, and mentor. My 750 hours of involvement have accrued me [bronze and silver membership recognition standing](#) over the course of my 4 years of service.

Change Thru Games (December 2014)	Dance For A Chance 2015 (May 2015)	Change Thru Games II (November 2015)
Co-Founder	Fundraising Chair	Lead Director
Raised \$525 towards The Eliminate Project.	Raised \$1500 towards Thomas House Family Shelter.	Raised \$755 towards The Eliminate Project.

IGN Entertainment

I have also been a community moderator, avid blogger, occasional podcaster, and all-star member on IGN Entertainment between 2011 and 2016. My duties included moderating and filtering comments as per IGN's terms and conditions, including issuing warnings and bans. I published over 240 blog posts, many of which have been featured on popular websites such as ZeldaDungeon and NintendoLife. Below is a small sample of my works.

- [A piece on minority opinion in the gaming industry.](#)
- [A critique on the portrayal of sex in video games.](#)
- [An argument for parental supervision in game purchases.](#)

Awards

Chancellor's Award of Distinction

UCI Alumni Association (June 2017)

The Chancellor's Award of Distinction recognizes an exceptional group of graduating students who exhibit a commitment to cutting-edge research, leadership, or service to UCI. The award recognizes UCI's most outstanding undergraduates.

UROP Fellowship Award

Undergraduate Research Opportunities Program (January 2017)

UROP provides funding in support of UCI faculty-mentored undergraduate research and creative projects. \$2000 was awarded in support of "Special Call (Gaming): Augmented Reality User Interfaces for Serious Games".

Winner, 2nd Place

Autism App Jam (April 2016)

The Autism App Jam is a two-week competition where teams use their creativity to develop an app that would benefit persons with Autism. The apps will be judged and the top teams will be awarded prizes and recognition.

Hype Award

Autism App Jam (April 2016)

The recipients of the Hype Award showcase exemplary skills in the documentation and development of their application.

Outstanding Club Website, 1st Place

Circle K International (March 2016)

This award is presented to the top club with the most outstanding website based on appearance, content, usage, organization, and promotion of events.

Distinguished Appointed Board Officer

Circle K International (March 2016)

This award is presented to an Appointed Board officer who demonstrates excellent achievement in his/her role. The award illustrates the distinguished Appointed Board officer's dedication, participation, and contribution to Circle K.

Member of the Week

Circle K International (October 2014)

Each week, the board members of UCI Circle K select one exemplary member who showcased the three tenets of Circle K: service, leadership, and fellowship.

Blog of the Week

IGN Entertainment (July 2014)

The MyIGN community will nominate what they feel are the most interesting, deserving, and entertaining blogs of a given week.

Niles Rotary Club Scholarship

Rotary International (June 2013)

This award is given to a high school senior with outstanding service to school and community, high scholastic achievement.

Connect

Please feel free to connect with me on any of my social networks. My primary contact information can be found at the top of this page.

[GitHub](#) | [IGN](#) | [LinkedIn](#) | [Twitter](#)