Dr. Jacob W. Archambault

Full-stack DevOps developer

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Education

2017 **Ph.D.**, philosophy — Fordham University, Bronx, NY

Dissertation: The development of the medieval Parisian account of formal consequence. Director: Professor Gyula Klima. Passed without corrections.

2011 **M.A.**, philosophy (cum laude) — University of Houston, Houston, TX

2009 **B.A.**, philosophy (cum laude) — Franciscan University of Steubenville, Steubenville, OH

2021 (expected) **A.S.**, software development — Jefferson Commmunity and Technical College, Louisville, KY

Employment

May 2020- Software developer apprentice, DevOps Applications team — Waystar

Louisville, KY. Pioneered work on porting various team projects from .NET Framework to .NET Core and on project containerization with Docker; built, deployed, and configured team projects with Azure DevOps; set up logging of automated alerts from A10 load balancers to Microsoft Teams and Splunk, and co-led company-wide training on using YAML for Azure DevOps pipeline configuration.

Aug. 2019-May 2020 Software developer apprentice, Architecture team — Waystar

Louisville, KY. Contributed to a company-wide full-stack C# .NET framework applicant testing website implementing MVC pattern with Visual Studio and Git version control. Normalized back-end SQL Server databases and application model layer, and wrote database queries both in SQL directly and in C# with LINQ and Entity Framework. Wrote JavaScript/jQuery functions for DOM manipulation and sending/retrieving server information with AJAX, and improved HTML/CSS web accessibility and design responsiveness by adding semantic HTML, media queries, and Flexbox layouts.

2017-2018 Philosophy, Latin, and classics teacher — Highlands Latin School

Louisville, KY. Taught college-level material in Latin, ontology, and classics at advanced private high school. Led ontology students to fully reconstruct arguments and critically explicate texts from Plato, Aristotle, Thomas Aquinas, and others. Led Latin students to translate both from and to Latin, with assignments principally focused on Caesar. By pairing classic texts with carefully designed assignments, I improved student learning outcomes while decreasing student workload, leading 90% of students to earn the highest letter grade available.

2015-2017 Distinguished research fellow — Fordham University

Bronx, NY. Published numerous articles, book contributions, and an edited volume with publishers including Cambridge University Press, Brill and Springer, secured grants and honors from institutions including the University of Salzburg and the University of St Andrews, and presented papers at prestigious institutions across three continents, primarily in the history and philosophy of logic. For a full list of publications and presentations, see my *CV*.

2012-2015 Teaching fellow — Fordham University

Bronx, NY. Performed all essential functions for teaching undergraduate core curriculum courses in two courses, Ethics and Philosophy of Human Nature. Constructed syllabi and assignments. Conducted lectures. Graded and maintained records of student assignments. Held office hours, Maintained website. 15-35 students per section, 1-2 sections per semester.

Select programming projects

2019-present C# — Personal website

A .NET 5 MVC website with links to my programming projects, published papers, resume and CV, running in a Docker Linux container. Features implemented include partial views and dynamic page content generation, bundling and minification, custom routing, http status code error handling, and Google Analytics.

2020-present — Auto lot MVC store

A containerized three-project .NET 5 MVC solution consisting of a website front-end, a data access layer, and a model layer. Makes use of .NET 5 records, razor view components, custom tag helpers, exception filters, custom routing, and LINQ queries over objects linked via entity framework core to a SQL Server relational database. Expanded from a *Pro C# 7* tutorial.

2021 — Recursive folder copier

A containerized .NET 5 file I/O application recursively copying files to an output directory based on user prompts for filters by date, regex pattern, number of files to match per subdirectory, making use of a decorator pattern, dependency injection and multiple implementations of a common interface.

2020 — Student info app

Code Louisville certification received for completing coursework and this console project serializing student data gathered from user prompts to a JSON file. Implemented C# features include LINQ queries, reflection, delegates, exception handling, and JSON serialization.

2020 — Blazor calculator

A Blazor WebAssembly calculator application, unifying the code for various calculator operations via lambda expressions and model binding.

2020-present — Windows Presentation Foundation Calendar

A scheduling application developed with Windows Presentation Foundation, allowing the user to add, delete, and retrieve scheduled events from a backing text file.

2019-2021 Java — Federal Reserve data CSV reader

Code Louisville certification received for completing coursework and project merging, filtering, and writing Federal reserve data between csv files based on user input, showcasing facility with File I/O, Maven, Gradle, and Intellij Idea IDE.

2021 — Employee refactor

A Java tutorial showing through its git history how to convert a tightly coupled application using inheritance and mutable fields into one implementing best practices including strong encapsulation, composition over inheritance, object cohesion, loose coupling, immutability, and dependency injection, via an application printing out information for various types of employees, including an extensive README explaining the implemented design decisions.

2019 Python/SQL — CPI Index analysis

Code Louisville certification received for completing coursework and Jupyter Notebook project analyzing consumer price index data, demonstrating facility with SQL queries, commands and joins, Python database connections and the pandas and matplotlib libraries for data analysis and visualization.

2020-present OWL — Family tree ontology

A growing *ontology*, that is, an organized categorization of reality into various types, detailing my family tree, starting from simple relationships and defining more complex ones in terms of the simpler ones. Written in OWL/RDFS and developed with Protégé ontology editor.

2020 — Music ontology

A music ontology focused on The Beach Boys' discography, detailing relations among songs, artists, albums, band members, and songwriters, among others.

2020-present

Country ontology

A highly modular ontology created via the use of imports and multiple files, based on the U.S. states and their common regional divisions according to the US Census.

2021

Front-end web development — Typescript income tax calculator

A front-end application using pure functions in TypeScript to display tax liability from a user's gross income input on a Bootstrap-styled HTML page.

2021

Node Flight booking

A Node.js application simulating a flight booking service using handlebars and express, and body parser.

2018

Infant massage website

Code Louisville certification. Completed coursework and front-end design for a business website instructing caretakers in infant massage. Includes proficiency with Visual Studio Code, HTML5, CSS3, JavaScript, Git and GitHub, APIs and content delivery networks, Bootstrap and jQuery libraries, and the principles of responsive web design.

Awards and honors

2017-2018

Ernst Mach Grant — Universität Salzburg, Institut für Philosophie

9,450 €. Salzburg, Austria. Awarded for project: 'Grounding Logical Consequence'. Supervisor: Prof. Julien Murzi. Financed by the Austrian Agency for International Cooperation in Education and Research (OeAd-GmbH), Centre for International Cooperation & Mobility (Declined).

2016-2017

Alumni dissertation fellowship. — Fordham University

$30,450. Granted to aid completing a dissertation in the history of logic, including translations of previously untranslated early medieval logic texts.

2015-2016

Mark and Kathryn Tomasic endowed fellowship. — Fordham University

$26,530 and reprieve from teaching responsibilities. Granted for exemplary research in medieval philosophy.

2015

Summer research fellowship. — Fordham University

$4,000. Granted for manuscript research project on texts used to teach logic in medieval France.

2014

Visiting postgraduateship — Arché research centure, University of St Andrews

St Andrews, Scotland. Competitive visiting postgraduateship with University of St Andrew's Arché Research Centre for Language, Logic, Metaphysics and Epistemology. Conducted research supervised by professor Stephen Read on the history and philosophy of logic, presented research at and participated in the centre's weekly colloquia.

Select publications

Edited volume

2018

1. *Consequences in medieval logic*. *Vivarium* 56:3-4, 201-366.

Journal articles

2019

2. 'Counterpossibles and normal defaults in the *filioque* controversy'. *Logica Universalis* 13:4, 443-455.

2018

3. 'Introduction: consequences in medieval logic'. *Vivarium* 56:3-4, 201-221.

4. 'Consequence and formality in the logic of Walter Burley'. *Vivarium* 56:3-4, 292-319.

5. 'Monotonic and non-monotonic embeddings of Anselm's proof'. *Logica Universalis* 11:1, 121-138.

2017

Conference proceedings

6. 'Mereological hylomorphism and the development of the medieval substitutional account of formal consequence'. In G. Klima and A. Hall (eds.), *Hylomorphism and Mereology: Proceedings for the Society of Medieval Logic and Metaphysics 15* (Cambridge Scholars), 81-103.

2018

Web publications

7. 'Object-oriented programming objects aren't objects'. *Medium.com, programming*. May 11

2019

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8. 'On semantic ambiguity in Anselm of Canterbury's ontological argument'. *Medium.com, philosophy*. May 8.

Skills

DevOps	Docker, Azure DevOps, YAML, Git, SVN, Jira, Jenkins, Agile development
C# .NET	ASP.NET Core, Entity Framework Core, LINQ, Blazor, WPF
SQL	Microsoft SQL Server, SQL Server Management Studio, SQLite, MySQL
Ontology/Knowledge Engineering	OWL, RDF, Protégé, SWRL, SparQL
Java	Gradle, Maven, JavaFX, Swing, Intellij Idea, Eclipse
Data analysis	Python, Pandas, Matplotlib, Jupyter Notebooks
Web development	TypeScript, JavaScript, Node.js, Handlebars, jQuery, AJAX, JSON; CSS, Bootstrap; semantic HTML, responsive web design; Chrome dev tools, WordPress

References

Mark Hamner
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