Jal Irani

Email: jirani[at]towson[dot]edu
Website: jalirani.com
LinkedIn: jalirani
GitHub: jalirani

EDUCATION

University of Maryland, Baltimore County   Baltimore, MD
Ph.D. Information Systems   2021–Current
- Advisor: Dr. Sanjay Purushotham
- Research Focus: Natural Language Processing

Johns Hopkins University   Baltimore, MD
M.S. Computer Science   2015–2017

Towson University   Towson, MD
B.S. Computer Science   2013–2015

UNIVERSITY TEACHING EXPERIENCE

- **Adjunct Faculty**, Johns Hopkins University   Fall 2019 - Current
  Johns Hopkins Carey Business School

- **Lecturer**, Towson University   Spring 2018 - Current
  Department of Computer and Information Systems

- **Adjunct Faculty**, Towson University   Fall 2017
  Department of Computer and Information Systems

UNIVERSITY RESEARCH EXPERIENCE

- **Graduate Research Assistant**, University of Maryland, College Park   Fall 2020 - Current
  I have been working as a Research Assistant for Dr. Naeemul Hassan since August 2020 in the Computational Journalism Lab. My current research is focused on analyzing IPV using Machine Learning and Natural Language Processing to accurately classify violence self-disclosures on social media.

- **Undergraduate Research Assistant**, Towson University   Fall 2013 - Spring 2015
  As part of Dr. Sandro Fouché's research group, I worked on an intercollegiate team alongside the University of Maryland, College Park researching mobile teaching technologies. My contributions included developing and coding several Java Servlets to handle intelligent parsing and dispatching of user transactions to the mobile application front-end.

PUBLICATIONS

[1] **J. Irani**, K. Nisson, Y. Cole, S. Fouché, and A. Porter, "Mobile Teacher - A Platform for Interactive Education Beyond the Classroom", in *2014 Consortium for Computing Sciences in Colleges Eastern Conference*, Nov. 2014.

Professional Experience

Flave   Baltimore, MD
Founder   Jan 2020-Current

– Flave is the easiest way to support local restaurants.
  * **Featured**: WBAL, BBJ, Technical.ly

SchoolDuels   Baltimore, MD
Head of Product   Nov 2018-Jan 2020

– Led engineering and product teams in development, growth, and expansion from ideation to $125k in ARR. Successfully secured $1MM in seed round funding within first year of incorporation.

TrackOFF (Acquired by Avast)   Baltimore, MD
Lead iOS Developer   Nov 2017-Nov 2018

– Supported and worked on all phases of software project delivery, including initial client engagement and requirements gathering, user centered design, agile development practice, CI/CD, hand-off and knowledge transfer to the client, and post-production support and trouble-shooting.

ZeroFOX   Baltimore, MD
Full-Stack Developer   Jan 2016-Nov 2017

– Created asynchronous rules using JavaScript to alert the ZeroFOX platform on threatening/suspicious activity using social media APIs. Designed and taught a two-day JavaScript-based Security Engineer training curriculum for non-technical customers.

Mindgrub   Baltimore, MD
iOS Developer Intern   Sept 2015-Dec 2015

– Wrote automated UI tests using Calabash to ensure new features and version updates did not affect any use cases of the Polk Audio Omni Utility application.

Primary Data   Los Altos, CA
iOS Developer Intern   May 2015-Aug 2015

– Developed a proprietary iOS application to visually define memory management options for a software-defined storage system. The resulting application was presented at VMworld 2015 in SF, California.

Towson University   Towson, MD
iOS Developer Intern   Aug 2014-May 2015

– Maintained and redeployed the Wavyleaf application to allow users to plot, photograph, and detail their sightings of the invasive plant species.

Textron Systems   Hunt Valley, MD
Software Engineering Intern   May 2014-Aug 2014

– Modified testing tools to simulate the embedded C++ airborne software system to support multiple payload configurations.

Vane Brothers   Baltimore, MD
Software Engineering Intern   May 2013-Aug 2013

– Wrote a proprietary C# application that tracks the location, speed, direction, weather, fuel, payload, and crew information for the entire 120 vessel fleet.

Courses Taught

- **BU 232.770: Cryptos & Blockchain**   Johns Hopkins University
  Fall II 2020 (enrollment: 18)
  Spring II 2020 (enrollment: 131)
  Fall II 2019 (enrollment: 48)

- **COSC 617: Advanced Web Development**   Towson University
  Fall 2020 (enrollment: 9)
  Spring 2020 (enrollment: 22)
  Fall 2019 (enrollment: 10)
  Fall 2018 (enrollment: 9)
  Spring 2018 (enrollment: 16)

- **AIT 618: Client/Server Programming**   Towson University
  Fall 2020 (enrollment: 12)
  Summer 2020 (enrollment: 7)
  Fall 2019 (enrollment: 19)
  Summer 2019 (enrollment: 19)
  Fall 2018 (enrollment: 26)
  Summer 2018 (enrollment: 22)
  Fall 2017 (enrollment: 24)

- **AIT 616: Fundamentals of Web Programming**   Towson University
  Summer 2020 (enrollment: 11)
  Spring 2020(enrollment: 47)
  Summer 2019 (enrollment: 23)
  Spring 2019 (enrollment: 43)
  Summer 2018 (enrollment: 21)
  Spring 2018 (enrollment: 46)

- **COSC 484: Web Programming**   Towson University
  Fall 2020 (enrollment: 51)
  Spring 2020 (enrollment: 60)
  Fall 2019 (enrollment: 45)
  Spring 2019 (enrollment: 30)
  Fall 2018 (enrollment: 48)
  Spring 2018 (enrollment: 53)

Skills

- **Programming Languages (Advanced):** Python, JavaScript/ES6+, Swift
- **Programming Languages (Intermediate):** MATLAB, Java, Kotlin
- **Programming Languages (Basic):** C# & C/C++
- **Related Technology:**
  - **iOS Development**: SwiftUI & UIKit
  - **Full-Stack Web Development**: React.js, Node.js, Express.js
- **Most Used Libraries:** TensorFlow, NumPy, NLTK, scikit-learn
- **Cloud Technology:** AWS & Heroku

Projects

See full list of projects on **github.com/jalirani**

- **Darla** (SwiftUI/NLTK, Current)
  Generates text conversation responses
- **OnLooker** (Swift, 2019)
  Share & view short video clips

- **SleepIn** (Swift, 2019)
  Cancels alarm if school is closed
- **SmartAddress** (Swift, 2018) *Sold: October 2018*
  Address book that compares Uber & Lyft rates

Awards

- USM COVID App Challenge Winner   2020
- Mary Hudson Scarborough Award   2015
- CCSC-E Student Poster Runner-up   2014

Extracurricular Activities

- StarTUp Accelerator   2020–Current
  Faculty Advisor
- CountySportsZone   2018–Current
  Advisory Board Member