

Ajay Patel

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EDUCATION

University of Florida, College of Liberal Arts and Sciences (GPA: 3.89/4.0)
Bachelor of Science in Zoology, Minor in Wildlife Ecology and Conservation
Honors: *summa cum laude*

December 2020
Gainesville, FL

WORK EXPERIENCE

Virginia Polytechnic Institute and State University
Hellbender Research Technician

August 2021 – January 2022
Blacksburg, VA

- Conduct hellbender occupancy and nest checks of approximately 300 nest boxes across 10 field sites.
- Assist in the capture, blood collection, and release of hellbenders.
- Responsible for careful animal processing and data collection related to hellbender morphometrics and body condition.
- Responsible for maintenance of nest box cameras, associated batteries, and equipment.

Mississippi State University Coastal Research and Extension Center
Point Count Technician

April 2021 – August 2021
Biloxi, MS

- Conducted point count, call playback, and wetland vegetation surveys for secretive marsh birds along the Mississippi Gulf. Field work occurred in harsh salt marsh conditions and required hiking through deep mud and unforgiving vegetation.
- Responsible for boat and 4x4 vehicle operation and maintenance, including towing trailers.
- Responsible for data collection, entry, and management.

Quiltingqueen
Founder and CEO

May 2018 – Present
Jacksonville, FL

Quiltingqueen is a creative acrylic and wood solutions company specializing in the creation and design of various quilting templates, stencils, and shapes. Since the starting of the business we have expanded into other markets including custom acrylic/wood design, various artistic products, and commodity wood items.

- Design and create various acrylic/wood products through use of AutoCAD, other CAD software, and industrial machinery
- Responsible for manufacturing, customer service, shipping and handling, quality control, and R&D
- Steadily increased company revenue at least 70% annually for the past 2 years (total revenue >100,000\$), through effective marketing, further R&D, and budget analysis.

Rapid Genomics
Sales, Marketing, Commercial Laboratory Intern

May 2019 – June 2021
Gainesville, FL

- Conducted market research to identify new opportunity areas for growth and key target accounts within those areas.
- Implemented a quarterly newsletter designed to provide value for new and existing clients, through informing on advancements of the company, its technologies, and collaborations.
- Utilized the scope of service offered to determine potential clients interested in Next-Gen Sequencing.
- Learned about applications and limitations of NGS technologies and relevance to evolutionary biology and agriculture.
- Completed tasks critical to maintaining the functionality of the commercial laboratory.
- Prepared, washed, and sterilized labware used in commercial operations
- Utilized advanced robotics to conduct nucleic acid quantitation, in order to mitigate risk of failure in downstream experiments.

RESEARCH EXPERIENCE

Florida Museum of Natural History Ornithology Collections
Undergraduate Researcher and Curatorial Assistant

January 2018 – May 2019, August 2020 – December 2020
Gainesville, FL

- Conducted an independent study of *Athene cunicularia* determining the presence of morphological variation between an extinct Bahamian population and extant continental populations in the United States, and South America.
- Gained proficiency in use of Macro and Micro imaging systems.
- Responsible for data collection on standard dimensions from various wing, leg, and breast bones.
- Molecular lab experience including DNA extraction of 50+ specimens.
- Responsible for understanding and executing curatorial tasks including specimen preparation, and record digitization.

Florida Museum of Natural History Ichthyology Collections

Field Crew Member and Undergraduate Researcher

June 2019 – December 2020

Kanchanaburi, Thailand & Gainesville, FL

- Attempted to elucidate potential environmental effects on differential gene expression between two allopatric forms of *Psuedomystus siamensis*, a small bagrid catfish, distributed across an elevational gradient.
- Determined morphological variation between cryptic species in the genus *Schistura*.
- Collected fish specimens from streams and rivers, utilizing dip and seine nets in order to understand species distributions.
- Assisted in fisheries conservation efforts, through removal of illegal gill nets, to protect fish during breeding migrations.
- Identified specimens based on various morphological features, and observed habitat.
- Photographed specimens using specialized photography equipment for a future identification guide.
- Determined ichthyologic biodiversity in the area, as well as rectify morphological and taxonomic relations between the species.

Bigelow Laboratory for Ocean Sciences

REU Intern

May 2020 – August 2020

Boothbay, ME (remote)

- Drafted proposal for future research pertaining to potential nutrient subsidies derived from seabird guano, in the Gulf of Maine kelp forest ecosystem.
- Conducted data analysis in R, pertaining to insular seabird occupancy utilizing longitudinal data.
- Created proposals, research methods, a poster, and other scientific writing related to the project of study.
- Collaborated with various governmental organizations, to facilitate data-generation and procurement.

Ordway Lab of Ecosystem Conservation

Data Analyst

September 2019 – August 2020

Gainesville, FL

- Conducted data management and analysis on foraging behavior for avifauna in various South American countries.
- Developed a familiarity with specific bird species/groups, and their typical behaviors.
- Enhanced understanding of tropical avian behavioral ecology in effort to improve conservation of tropical birds.

Florida Museum of Natural History Vertebrate Paleontology Collections

Curatorial Assistant

August 2018 – December 2018

Gainesville, FL

- Conducted isolation of fossil elements from substrate.
- Identified and categorized fossil elements for addition to the collection.
- Responsible for understanding and executing various curatorial tasks.

PUBLICATIONS

Patel, A.M., D.W. Steadman. 2020. The Pleistocene Burrowing Owl (*Athene cunicularia*) from the Bahamas. *Journal of Caribbean Ornithology*

PROFESSIONAL PRESENTATIONS

Patel, A.M., D.B. Rasher 2020. Potential Influence of Fish-Eating Seabirds on Kelp Forest Ecosystems in the Gulf of Maine. Bigelow Laboratory for Ocean Sciences REU Symposium, Boothbay, Maine

Patel, A.M., L.M. Page 2020. Differentiating Two Species of Stone Loach from Thailand. Spring Undergraduate Research Symposium, University of Florida, Gainesville, Florida.

Patel, A.M., D.W. Steadman 2019. The Pleistocene Burrowing Owl (*Athene cunicularia*) from the Bahamas. Undergraduate Research Assistantship Program Symposium, University of Florida, Gainesville, Florida.

Patel, A.M., D.W. Steadman 2018. The Pleistocene Burrowing Owl (*Athene cunicularia*) from the Bahamas. Fall Undergraduate Research Symposium, University of Florida, Gainesville, Florida.

AWARDS

- 2018 Emerging Scholar Award Recipient (\$1000 stipend)
- 2019 University Scholars Program (\$1750 stipend (used for research), \$500 research stipend)

SCIENTIFIC SERVICE, INVOLVEMENT and OUTREACH

University Teaching Committee (UTC)

August 2018 – December 2020

Committee Member

Gainesville, FL

- Organized an outreach event, meant to facilitate connections between ambitious undergraduates and FLMNH faculty.
- Decided and/or ranked research proposals, research papers/articles, and posters based upon quality of work, relevance to the mission of the FLMNH, achievement of intended goal, and various other criteria.
- Provide input regarding various material's readability, digestibility for the general public, and relevance to undergraduates at the University of Florida.
- Maintain accurate knowledge and be able to articulate the goals, research statuses, various departments and organizations, general work, and initiatives of the FLMNH.

Center for Undergraduate Research

September 2018 – December 2019

Ambassador and Undergraduate Liaison to the FLMNH

Gainesville, FL

- Maintain a professional relationship with the FLMNH, as it pertains to events and initiatives focused on expanding research at the FLMNH.
- Effectively communicating with students to aid in their acquisition of research, specifically assisting in email and other direct communication with faculty.
- Coordinate connections and research opportunities for undergraduates, through networking and maintaining professional relations with various faculty, staff and researchers.
- Organize and execute an "exposition" event designed to expand public/undergraduate knowledge about research at the FLMNH and connect researchers with passionate undergraduates.

Accent Speakers Bureau

January 2018 – May 2018

Assistant Director of Productions

Gainesville, FL

- Responsible for security and composure of events, including designation of seating and admittance into reception.
- Delegated tasks regarding planning and execution of reception.
- Assisted with ticket distribution as well as advertisement of events.
- Facilitated ease of transition from event to reception through providing direction and assistance.

VOLUNTEERING

Prairie Creek Banding Laboratory

November 2020 – December 2020

Volunteer

Gainesville, FL

- Carefully captured, handled, and processed birds (including banding, aging, sexing and collection of morphometric data).
- Set up and monitored six mist nets with extractions performed at thirty minute intervals.

Habitat for Humanity Collegiate Challenge

March 2018

Volunteer

Asheville, NC

The Collegiate challenge is an alternative break initiative consisting of 50+ hours of building affordable housing for people in need.

- Interfaced with families whose homes were being built. Their sincere thankfulness for how the habitat for humanity has changed their lives was one of the most moving experiences of my life.
- Conduct a minimum of 50 hours of construction work including, framing, painting, tile and wood laying, various yard work, and vapor barrier installation.

Freshman Leadership Council (FLC)

August 2017 – May 2018

Council Member and Mentor

Gainesville, FL

FLC is a student government organization designed to enhance and develop leadership qualities in promising freshman at UF.

- Executed the fundraising role for the FLC event, Project H.O.P.E. Resulted in raising a total of \$828. This money was leveraged to assist the homeless community in Gainesville.
- Mentor a freshman about effective life/study habits, navigating their undergraduate degree and general life advice.

SKILLS

Field Skills

- Line transects and point counts / call playback surveys, mist-netting, bird banding, specimen preparation (birds and fish)
- Collection and identification of fishes, with particular focus on the freshwater fishes of Florida and Thailand
- Proficient in boat operation, and towing trailers
- Trained in GPS, map, and compass-based navigation
- Manual Transmission and 4WD, adept at automotive repair

IT/ Tech.

- Extensive knowledge of the Microsoft Office Suite, with emphasis on Excel and Access
- Working knowledge of R Studio, related to statistical analyses and data visualization, including Principal Component Analyses and statistical corrections
- Adept at Auto-Cad, 2-D modeling, and vector design, working towards proficiency in 3-D modelling
- Skilled in use of Macro and Micro imaging systems (BK PLUS Lab System), and various photo editing software including Adobe Lightroom, and GIMP

Languages

- Spanish – Limited Working Proficiency (\approx ILR Level 2)
- Gujarati – Mother Tongue (\approx ILR Level 3)
- English – Native Language (ILR Level 5)

Misc.

- NAUI Open Water Dive Certified (8 years, 40 logged dives)
- Installation of residential solar panel arrays and accompanying hardware and wiring

Certifications

- CPR, AED and First Aid certified
- Mississippi Boating License
- Biomedical Waste Training

Memberships

- American Ornithology Society
- Phi Beta Kappa Society