Siddharth Dixit
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KEY QUALIFICATIONS

- Policy analyst and researcher with over six years of experience in the private and not-for-profit sectors.
- Strong quantitative skills such as Project Appraisal, Data Wrangling and Visualization, and Machine Learning (experience in using Statistical and Neural Network Algorithms for Natural Language Processing). Experience in using Rstudio (Packages: tidyverse, Shiny), Python (Library: Pandas, NumPy), Keras, Stata, and MS Office.
- Five years of experience in program management, planning and strategy, including conception and launch of new programs and an NGO.
- Product designer experienced in redesign and launch of new technologies using quantitative and qualitative research methods.
- Experience in managing critical client relationships, and communications with multiple stakeholders including mentoring and training of new employees, and capacity building of colleagues.

PROFESSIONAL EXPERIENCE

Duke University, Durham, USA   **7/2017- Present**
Associate in Research

- Working on a BMGF sponsored project at the Center for Policy Impact in Global Health (CPIGH) in DGHI on the impact of health transitions on 4Ds-- Disease, Demography, Development Assistance for Health, and Domestic Resource Mobilization (DRM) in six middle-income countries:
  - Lead project implementation in two of the six countries--Nigeria and Ghana. The work entails developing in-country partnerships, liaison and manage communications with the in-country partners, review project protocols, work with the partners to conduct the analytical tasks, and review and track timely submission of deliverables.
  - Published health aid transition profile for International Development Association (IDA).
  - Published report on Nigeria and Ghana's response to COVID-19.
  - Working on developing 4Ds transition profile for Nigeria and Ghana to understand the challenges and opportunities in achieving Universal Health Coverage in these countries.
- Working on developing a machine learning pipeline for text classification problems using a database on Global Functions for healthcare developed by CPIGH which could be used for other health projects:
  - Used NLTK, Tf-IDF and Word Embeddings for data preprocessing--Removing stop words, stemming, tokenizing, and creating vectorized matrix.
  - Used different machine learning algorithms like Naïve Bayes Classifiers, Ensemble methods, Recurrent Neural Networks etc. for comparison and training the model.
- Worked on a USAID sponsored project at the Evidence Lab in Duke Global Health Institute (DGHI) to conduct economic analysis of the impacts of Saving lives at Birth (SL@B) program:
  - Created a macro enabled excel-based costing tool to collect cost data from the SL@B funded innovators. The tool is now publicly available for use by any health innovator.
  - Reviewed and updated impact models to calculate the lives saved by the SL@B funded innovations
  - Led the cost-effectiveness analysis (CEA) study of following SL@B funded health innovations. The study reports are publicly available:
    - CEA of BEMPU- TempWatch in India
    - CEA of Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) – Pratt Pouch in Uganda
    - CEA of Partners in Health – All Babies Count in Rwanda
    - CEA of INMED – Bilikit™ in Peru

- Developed and applied project appraisal framework under deep climate change uncertainty to public infrastructures in the Caribbean country of St. Lucia for a World Bank sponsored project. The responsibilities included:
  - Developing a probabilistic mathematical model to include climate uncertainly in the traditional project appraisal framework.
  - Liaising with team members in other parts of Duke University.
  - Dealing directly with the client on deliverables and presenting the findings to staff and management at the World Bank.
- Conducted policy research, and co-authored a working paper on trade and investment relationship between India and Sub-Saharan Africa (SSA):
  - Converted some of the static plots from the India-SSA trade and investment working paper into interactive charts using R packages such as ggplot2, Plotly, and Shiny to share them online.
  - Created a dynamic dashboard, using the WDI database, to visualize the historical movement of countries from low-income to middle-income to high income based on their GNI per capita.
- Wrote and developed concept notes for various grant proposals.
- Helped in organizing and managing Duke's first International Development Conference held in November 2018.

The World Bank, Washington D.C., USA   **5/2016-8/2016**
Intern, Enabling the Business of Agriculture (EBA) / Development Economics (DECSI)
- Conducted detailed research on laws, regulations and policies for agriculture machinery relating to import, performance standards, registration and testing for Tanzania, Sudan, Nigeria, Ghana, Zambia, Rwanda, Ethiopia, Mozambique, Thailand, Philippines, Sri Lanka and India.
- Collected data for EBA topics on Seed, Information and Communication Technology (ICT) and Markets.
- Participated in developing effective partnerships with leading organizations and experts in India on various EBA topic areas.

Ashoka Innovators for the Public, Bangalore, India   **6/2013-5/2014**
Consultant, Rural Innovation and Farming
- Worked with leading agriculture-entrepreneurs in India on creating a one-year immersion fellowship called "Young Agri Changemakers" to attract young talent to agriculture sector. Responsibilities included:
  - Designing the curriculum framework and developing case studies about social enterprises.
  - Detailing the budget of $ 50 million USD.
  - Designing the program structure and curriculum.
  - Managing communication between multiple stakeholders including social-entrepreneurs, academic institutions, and potential funders.

John Deere India Pvt. Ltd., Pune, India
Senior Engineer 1, Design Team   **7/2009-5/2012**
- Coordinated and executed multi-million-dollar projects in the tractor chassis area.
- Worked and coordinated with multi-cultural teams across three continents.
- Involved in design of hydraulics and chassis of small tractors for Indian market.
- Tasked on capacity building of new employees in design team.
- Reduced errors by half by training and educating employees about best practices and engineering standards.

Acacia Foundation, Pune, India (10 hours/week)   **12/2010-7/2012**
Co-founder and President
- Set up Acacia Foundation as an NGO (non-government organization) to help the underprivileged differently-abled children in India to live a better life.
- Built a diverse team and got Acacia registered as an NGO.

- Formulated the policies for donations and selection and compliance requirements of NGOs.
- Managed communication with multiple-stakeholders such as, NGOs, donors and banks.
- Brought 100 children onto the platform and raised $1000 in first 3 months (minimum online donation: $2).
- Organized many recreational events and trips for the underprivileged children.

EDUCATION

Master of International Development Policy (Applied Economics)   **8/2015-5/2017**
Duke University, Durham, USA
- Received graduate certificate in International Peace and Conflict Resolution from University of North Carolina at Chapel Hill, USA.
- Masters project on irrigation issue and its impact on small farmers, and food security in Uttar Pradesh, India. Conducted secondary research and data analysis to understand the issue of irrigation in the state.

Coursework in Master of Public Affairs Program   **8/2014-5/2015**
Sciences Po, Paris, France
- Received French Government Scholarship (Charpak Scholarship) to attend the program.
- Project on B2B dynamics and redesign of BEE (Black Economic Empowerment) policy in South Africa. Conducted field interviews in Johannesburg, South Africa to understand how different stakeholders were negotiating to redesign the BEE policy in construction Industry.

Certificate in Liberal Arts, Young India Fellowship (YIF)   **5/2012-5/2013**
Ashoka University, India
- One of the 97 fellows selected from among thousands of applicants from across India to study on full scholarship ($10,000). YIF runs in association with the University of Pennsylvania's School of Engineering and Applied Sciences, Carleton College, USA, and Sciences Po, Paris.
- Worked on a project to conduct primary and secondary research to understand the role played by Gram Pradhans (elected village representative) in Raebareli (India) in rural development, their political and economic functionality, and how conflicts and negotiations over the control of scarce resources by various groups influence the power relations and public service delivery in villages.

Bachelors of Engineering (Mechanical Engineering)   **8/2005-5/2009**
Manipal University, India

SKILLS/LANGUAGES

Programming Language/Tools: [R, Python, Keras, Stata], [R ggplot2, R shiny, R Markdown, Pandas, NumPy, scikit-learn, Jupyter Notebook, MS-Excel--VLOOKUP, Pivot Tables, PowerPoint, MS-Word]

Algorithms: [Linear & Logistic Regression; K-nearest neighbors (KNN); Naïve Bayes; Random Forests; Gradient Decent; Tf-IDF; Multilayer Perceptron (MLP); Convolutional Neural Network (CNN); Recurrent Neural Network (RNN); Long Short-Term Memory (LSTM)]

Languages: Hindi (mother tongue), English (professional fluency)

PUBLICATIONS

Reports

- Dixit, S., Shahid, M., Fernholz, F., Ogbuoj, O., Biru, B., Baumgartner, J. N., & Udayakumar, K. (2020). *Cost-Effectiveness Analysis: Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) – Pratt Pouch.* Durham: Evidence Lab, Duke Global Health Institute. Retrieved from https://sites.globalhealth.duke.edu/evidencelab/wp-content/uploads/sites/23/2018/07/Bempu-CEA-Report.pdf

- Dixit, S., Shahid, M., Fernholz, F., Ogbuoj, O., Biru, B., Baumgartner, J. N., & Udayakumar, K. (2020). *Cost-Effectiveness Analysis: Partners inHealth–All Babies Count.* Durham: Evidence Lab at Duke Global Health Institute. Retrieved from https://sites.globalhealth.duke.edu/evidencelab/wp-content/uploads/sites/23/2018/07/PIH-CEA-Report.pdf

- Dixit, S., Shahid, M., Fernholz, F., Ogbuoj, O., Biru, B., Baumgartner, J. N., & Udayakumar, K. (2020). *Cost-Effectiveness Analysis: BEMPU-TempWatch.* Durham: Evidence Lab, Duke Global Health Institute. Retrieved from https://sites.globalhealth.duke.edu/evidencelab/wp-content/uploads/sites/23/2018/07/Bempu-CEA-Report.pdf

- Dixit, S., Shahid, M., Fernholz, F., Ogbuoji, O., Biru, B., Udayakumar, K., & Baumgartner, J. (2020). *Cost Effectiveness Analysis: INMED Bilikit™.* Durham: Evaluating Saving Lives at Birth (E-SL@B) Program; Duke Global Health Institute Evidence Lab & Global Health Innovation Center at Duke University.

- Dixit, S., Fernholz, F., Ogbuoji, O., Finnegan, A., Biru, B., Udayakumar,K.,& Baumgartner, J. (2020) *Costing Tool for Health Innovators.* Durham: Evaluating Saving Lives at Birth (E-SL@B) Program; Duke Global Health Institute Evidence Lab & Global Health Innovation Center at Duke University

- Dixit S, Ogundeji YK, Onwujekwe O, Ezenwanfor C, Ohiri K, Ogbuoji O, Mao W, Bharali I, Yamey G. *Nigeria's policy response to COVID-19*. The Center for Policy Impact in Global Health. Policy Report: June 2020. Available at: http://centerforpolicyimpact.org/our-work/the-4ds/nigeria-policy-response-to-covid-19/.

- Zhang J, Nonvignon J, Dixit S, Mao W, Yamey G. *Ghana's policy response to COVID-19*. The Center for Policy Impact in Global Health. Policy Report: July 2020 Available at: http://centerforpolicyimpact.org/our-work/the-4ds/ghana-policy-response-to-covid-19/

- Dixit, S., McDade, K. K., Yamey, G., & Schäeferhoff, M. (November 2019*). HEALTH AID in TRANSITION: A Review of the World Bank International Development Association (IDA).* Durham: The Center for Policy Impact in Global Health. Retrieved from http://centerforpolicyimpact.org/wp-content/uploads/sites/18/2019/11/IDA-Transition-Profile-Final-1.pdf

- McDade KK, Schäferhoff M, Ogbuoji O, Bharali I, Dixit S, Mao W, Bandara S, Yamey G. *Transitioning away from donor funding for health: a cross-cutting examination of donor approaches to transition*. The Center for Policy Impact in Global Health. Duke Global Working Paper Series: number 21, April 2020. Available at: http://centerforpolicyimpact.org/transitioning-away-from-donor-funding-for-health-cross-cutting/.

Working Paper

- Dixit, S., Gill, I. S., & Kumar, C. (2018). *Are Economic Relations with India Helping Africa? Trade, Investment and Development in the Middle-Income South.* Washington DC: The Brookings Institution. Retrieved from https://www.brookings.edu/wp-content/uploads/2019/03/Are-Economic-Relations-with-India-Helping-Africa.pdf

Blogs

- Dixit, S., Ogundeji, Y. K., & Onwujekwe, O. (2020, July 2). *How well has Nigeria responded to COVID-19?* Retrieved from The Brookings Institute : https://www.brookings.edu/blog/future-development/2020/07/02/how-well-has-nigeria-responded-to-covid-19/

- Dixit, S., Emery, N., & Kumar, C. (2019, March 1*). Is trade with India changing Africa's health care landscape?* Retrieved from The Brookings Institute : https://www.brookings.edu/blog/future-development/2019/03/01/is-trade-with-india-changing-africas-health-care-landscape/