DIME Summer Internship Program – 2023

1. Summary

The Development Impact Evaluation (DIME) department offers internships to students enrolled in fields of study ranging from economics and public policy, to data and computer science. These internships provide students an opportunity to gain experience in development research and become exposed to programs aimed at improving public policy based on better data and outreach. The summer internship program combines project-specific experience with survey and data-related training, and covers thematic areas ranging from evaluating development effectiveness and infrastructure, to edutainment and governance.

Details about projects hiring in this drive are listed in [Section 8](#) of this document. Qualified candidates should apply using [this link](#) no later than Friday, March 10, 2023 at 1pm EST. Applications will be reviewed on a rolling basis.

Successful candidates will be required to submit documentation that they will receive either course credit or funding from their university for the internship prior to the beginning of the internship.

2. Background and objectives

DIME generates high-quality and operationally relevant data and research to transform development policy, help reduce extreme poverty, and secure shared prosperity. It develops customized data and evidence ecosystems to produce actionable information and recommend specific policy pathways to maximize impact. Most DIME IEs are associated with a World Bank project. DIME works across the following World Bank sectors: Agriculture, Governance, Climate Change, Financial & Private Sector Development, Entertainment Education, Transport & Infrastructure, Social Protection & Jobs, and Fragility Conflict and Violence. DIME establishes a research team to work on each IE study through its completion.

Each research team typically includes a principal investigator and co-investigators, a field coordinator based in country to support the government team on all aspects of the IE, and one or more research assistants to support data cleaning, processing, and analysis.

More information can be found at http://www.worldbank.org/dime.

3. Tasks and deliverables

The interns will report to the project Principal Investigators and other members of the Impact Evaluation team.

Duties for interns include, but are not limited to:
- Support the dissemination of impact evaluation methodology and results

- Support team members in writing well-documented, reproducible code for data cleaning, descriptive statistics, regression analysis, data visualization, and any other analysis as per project needs; and/or document all data work on the project's GitHub repository
- Manage databases, integrating various data sources (for example, project monitoring data, administrative data from local government, and household survey data). This may require programming matching algorithms, using spatial data to create linkages, performing manual matching, and linking up with field staff for additional information on specific tasks
- Conduct literature review and syntheses, contribute to impact evaluation reports and policy briefs, and support the design and development of concept notes, among other writing and editing tasks
- Contribute to the development and implementation of field protocols for primary data collection and procedures and survey instruments, including field protocol, data quality protocol, recruitment of field staff, field staff training, and survey pilots
- Coordinate acquisition of secondary data, such as administrative data
- Perform other related tasks, as discussed

4. Skills Required

The skills required vary across projects, but the following are desirable:

- *Academic background:*
  - Candidates should be currently pursuing a degree in **economics, public policy, statistics, computer science, or a related field**
- *Technical skills***:**
  - Knowledge of programming in Stata, R, or Python for data processing and analysis is desirable, and required for certain positions
  - Experience with survey programming in an ODK-based platform is desirable, and required for certain positions
  - Experience with machine learning, natural language processing, Shiny dashboards, and geospatial analysis is desirable, and required for certain positions
  - Experience coding in a team environment and using GitHub is highly desirable.
- *Experience***:**
  - Prior background in impact evaluation and econometric analysis is a plus
  - Experience working in developing countries preferred and knowledge about the relevant sectors is desirable
- *Capacity Building Skills***:**
  - Demonstrated ability and experience in designing and delivering training and capacity building activities or other teaching experience is a plus
- *Language***:**
  - Superior written and oral communications skills in English is essential
  - Certain positions may require fluency in other languages (such as French, Portuguese, Hindi, Swahili)
- *Interpersonal skills***:**

      o   Motivated self-starter, with demonstrated ability to work effectively and sensitively in teams, and excellent cross-cultural communication skills

5. Intellectual Property

The World Bank shall, solely and exclusively, own all rights in and to any work created in connection with this agreement, including all data, documents, information, copyrights, patents, trademarks, trade secrets or other proprietary rights in and to the work. The consultant is not allowed to post or publish (electronically or in print) any project-related information without the explicit permission of the Impact Evaluation Team.

6. Terms

The Research Assistants and Field Coordinators will be hired as a short-term consultant and remunerated according to the World Bank scale. Contract duration will be discussed on a project-by-project basis.

7. Selection Process

Qualified candidates should apply using [this link](#) no later than Friday, March 10, 2023 at 1pm ET. Applications will be reviewed on a rolling basis. Applicants will be asked to upload a zipped folder which include the following:

- Resume
- Brief statement(s) of interest (SOI). You may submit more than one SOI if you are interested in more than one position. Each statement of interest should be **no longer than 500 words**.
- One academic reference. We will contact you before reaching out to your reference.

NOTE: Only shortlisted candidates will be contacted.

The World Bank Group is committed to achieving diversity in terms of gender, nationality, culture, and educational background. Individuals with disabilities are equally encouraged to apply. All applications will be treated in the strictest confidence.

8. Projects with Open Positions

The details specific to projects hiring are listed below. You can express interest in multiple positions.

8.1 Towards an algorithmic extraction of causal knowledge from the impact evaluation literature

"In 2020 alone, 10,256 economic papers were submitted to the top 12 development economics journals. At five minutes per abstract, it would have taken a development geek 107 working days to keep up with the literature. If navigating the evidence is hard for researchers, it is almost impossible for anyone else. The objective of this project is to test whether recent advances in natural language processing (NLP) make it possible to accurately extract structured causal knowledge from the impact evaluation literature. To achieve this goal, we intend to pre-train a transformer model on a large dataset of economics papers,

echoing recent literature showing that pre-training transformer models on domain-specific documents improves their performance of downstream tasks. Second, we will create a benchmark dataset of impact evaluation papers in which causal knowledge is manually annotated in a machine-readable format that captures the nuances of causal statements within the economics literature. Lastly, the transformer model will be fine-tuned on the benchmark dataset and deployed on a comprehensive dataset of impact evaluation papers to produce a knowledge graph publicly available for researchers and policymakers, with the goal of enabling AI-assisted human decision making."

We seek to hire **2 (two)** summer interns to annotate key information from impact evaluation papers and expand the benchmark dataset of annotated papers that we will use to fine-tune the transformer model. Familiarity with impact evaluation literature is required and knowledge of NLP methods is a preferred.

8.2 Rwanda Feeder Roads Impact Evaluation

DIME is leading a portfolio of impact evaluations in Rwanda focused on sub-national trade, rural connectivity, and economic development. This includes evaluations of large-scale investments in road infrastructure, as well as research on place-based tax exemptions. The research team has constructed a unique data infrastructure, linking together geocoded data on the universes of firm-to-firm transaction level tax data, land registrations, subdivisions, and sales, population and establishment censuses, market price surveys, and detailed household survey data. We combine these data sources with quasi-experimental variation in the rehabilitation and construction of transportation infrastructure at small-scale (feeder roads linking villages to local markets) and large-scale (corridors linking secondary cities).

8.3 Communications & Knowledge Management

DIME's Knowledge Management and Communications team seeks to improve traction of DIME's research within the World Bank as well as across the portfolios of external clients and development partners. DIME is seeking to hire an intern with graphic design experience to support the development and dissemination of compelling visuals and knowledge products.

8.4 DIME 2 Edutainment and Edtech Program – Nigeria

In northern Nigeria, many children arrive unprepared for primary school and often graduate without knowing how to read and write. Poor teaching practices limit the effectiveness of traditional school-based investments. Due to adverse social norms, girls often do not complete primary school, very few enroll in junior secondary school, and many are married before the age of 18. The learning crises makes clear that 'business as usual' investments are simply not working. Informed by evidence-based research, this project will implement and evaluate two activities: 1) teacher training focusing on child-centered pedagogy complemented with EdTech content for use in primary schools, and 2) Girls Clubs providing critical life skills training to in- and out-of-school lower-secondary-aged girls complemented with community-level behavior change campaigns.

8.5 DIME 2 Edutainment and Edtech Program – Global

In developing countries, the learning poverty rate has gone up from 57 to 70 percent directly as a result of learning disruptions caused by the Covid-19 pandemic (World Bank, 2022). At the start of 2022, over 635 million children around the world remained affected by school closures (UNICEF, 2022). Two major problems are emerging in the post-pandemic scenario for global education: 1) many children are not returning to school after pandemic-related closures, and 2) pandemic-related learning loss is significant across different contexts, and especially affects poor and vulnerable children. This project seeks to consider educational games on smartphones targeting poor households with social media access as an alternative low cost and at scale mode for personalized instruction. The project will consist of a large-scale take-up campaign in Nigeria, Senegal, and Bangladesh to promote the use of EdTech content targeting foundational learning skills in young children. The project will also evaluate impacts on learning outcomes using digital learning assessments delivered through a state-of-the-art randomized pipeline design.

8.6 IDEAS Apprenticeship Program

This impact evaluation of the IDEAS apprenticeship component will generate new experimental evidence about the effectiveness of policy interventions to enhance traditional apprenticeships in Nigeria. By embedding a Randomized Control Trial (RCT) in the apprenticeship component, the impact evaluation will assess the relative cost and effectiveness of improving the training of MCP trainers in firms, their ability to certify apprentices' skills, and the provision of dual, center-based training in foundational, technical, and soft skills for youths/apprentices.

8.7 Evaluation Survey of Project "Maji Endelevu" about Sustainability of Communal Water Points in Tanzania

As part of a partnership with the Government of Tanzania and the UK FCDO, the World Banks Development Impact Evaluation (DIME) department will collect primary data from community management organizations in charge of water issues in villages across 40 districts in rural Tanzania and water points used by communities in these villages. This will form the endline round of the impact evaluation of an intervention called "Maji Endelevu" that builds an interface for communities to engage with local government to promote co-production in maintenance of communal water infrastructure.

8.8 Bureaucracy Lab

The Bureaucracy Lab is a joint initiative between The World Bank's Development Impact Evaluation (DIME) Research Group and The Governance Global Practice (GGP). Our objective is to generate high quality and operationally relevant data on civil service and public administration and to innovate bureaucracy through better data and analysis. The World Bank's Bureaucracy Lab summer interns will support The Bureaucracy Lab team in data analysis, partnership building, impact evaluation, dashboard construction, and policy outputs aimed at improving public-sector measurement systems and productivity.